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DISTRIBUTION & WAREHOUSING

TRANSFER & STORAGE

Vol. XIX, No. 1

CHICAGO AND NEW YORK

January, 1920

flexibility

The continuous shocks and twisting strains to which motor trucks are subjected when traveling over rough, guttered, worn down roads never reach the more delicate, vital parts of Selden flexible, shock-absorbing trucks. These vibrations are entirely absorbed by the new Selden method of frame construction.

Not a rivet is used in the construction of the new Selden models. S. A. E. bolts are used throughout; all joints

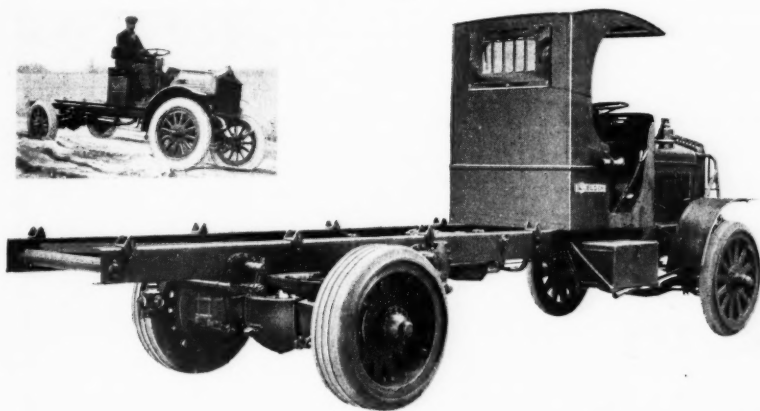
are of a flexible type that prevents sudden jars and jolts from inflicting serious damage; and well placed spiral springs offer still further protection. The methods of suspension of the motor and radiator, too, are such as to provide abundant protection for these sensitive parts.

Even a careless driver, who never turns a grease cup, can not seriously injure a flexible, shock-absorbing Selden Truck—all the less accessible joints are fitted with graphite-impregnated, self-lubricating bronze bushings.

All these and many other distinctive features of Selden Trucks combine to make them trucks of extra long life and low maintenance cost.

Write for "Transportation"

Ask us to send you regularly the new Selden Magazine—"TRANSPORTATION." It contains valuable information on the operation of motor trucks.



Ship by Truck—SELDEN Truck

1½, 2½, 3½, 5 Ton Models—all WORM Drive

SELDEN TRUCK CORPORATION, Rochester, N. Y., U. S. A.

Selden Motor Trucks

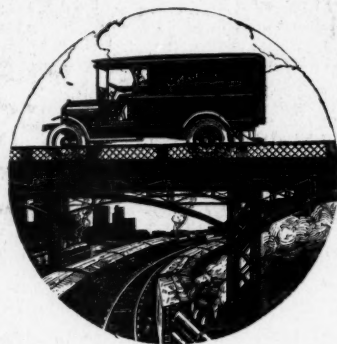
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Published Monthly. \$2.00 a Year.

Entered as second-class matter January 29, 1916, at the Post Office at New York under the act of March 3, 1879

GARFORD



—*Low Cost Ton-Mile* is
the basis upon which the
efficiency of Garford per-
formance is proven.

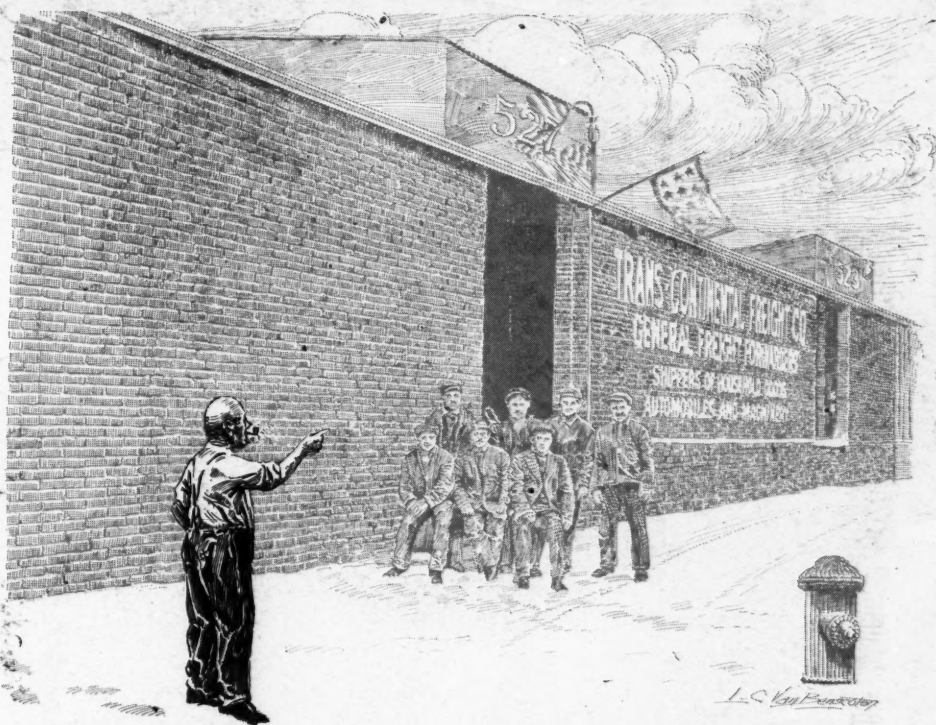
Garford

Lima, Ohio

*That the United States Army has made Garford a Class
A standard is another proof of Garford serviceability*

Garford Exhibit at New York Automobile Show, Space A-2, 8th Coast Artillery Armory
—Chicago Show, Space A-7

TRUCKS



Bill O'Laden, Traffic Expert Visits His Alma Mater

BILL," says th' New York Boss, "'tis some traveller ye be." "You've said it," Oi says. "Then," says th' Boss, "ye better be a travellin' up to our 30th Street Warehouse, give th' boys th' wanse over, an' rayport to me on progress." So up Oi goes, an' wanse Oi gets there, sure 'tis Oi as feels like an auld graduate a visitin' iv his Alma Mater, f'r 'twas there sure Oi studies forwardin' problems an' gets me degree iv B. S. in the course of Consolidated Shippin', th' B. S. meanin' Boss Shipper ye know.

'Twas noon whin Oi reaches me auld University, an' 'twas glad th' boys was to see me. "Lads," Oi says, "ye'll all tend to me before ye tend to y'r dinner pails, which—due to th' dhry spell we be a havin'—will be about ail

th' pails ye'll have to rush th' day, so what's y'r rush me Lads?"

"Now as an auld Grad, Oi'll spake to ye, an' as such ye'll believe me wurd when Oi tells ye how 'tis Oi as has visited th' principal points iv shippin' to New York, Chicago, Cleveland, Cincinnati, San Francisco, Los Angeles, Seattle, Boston, Buffalo an' Philadelphia, an' each was marked th' same—Trans-Continental Freight Co.—an' each showed me won thing—why th' great public as ships goods was consolidatin' their attention on, an' their freight by, th' T-C. F. Co."

"An' seein' it do be y'r dinner time, I'll detain ye no longer, save to ask ye to pardon me f'r havin' me coat off, but—raymember—none iv ye will expect me to pardon ye if ye don't have y'r coats off an' be on th' job whin th' whistle blows."

The "lithrachoory" articles of Bill O'Laden, Traffic Expert, are now being published in a handsome book. This book will be sent free on request. Don't fail to write for your copy as it will be sent on request only.

Trans-Continental Freight Company

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Hippodrome Building, Cleveland

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Write the Nearest Office



Announcing an Addition to the Autocar Line

BOTH

This New 120-Inch Wheelbase, Heavy Duty Autocar, and the 97- and 120-Inch Wheelbase 1½-2 Ton Autocars will be exhibited:

New York Truck Show
January 3 to 10
8th Coast Artillery Armory

Chicago Truck Show
January 24 to 31
International Amphitheatre

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The short wheelbase design and double reduction gear drive, distinctive of all Autocar construction, are embodied in this heavier Autocar.

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Ardmore, Pa.

Established 1897

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TRANSFER & STORAGE

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Boston.....640 Old South B'dg.
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Baltimore.....412 Garrett Bldg.
Pittsburgh.....437 Oliver Bldg.
Detroit.....527 Ford Bldg.

St. Louis.....1537 Boatmen's Bank Bldg.
New Orleans.....203 Marine Bank Bldg.
San Francisco.....64 Pine Street
Los Angeles.....517 Central Bldg.
Seattle.....402 Arctic Bldg.



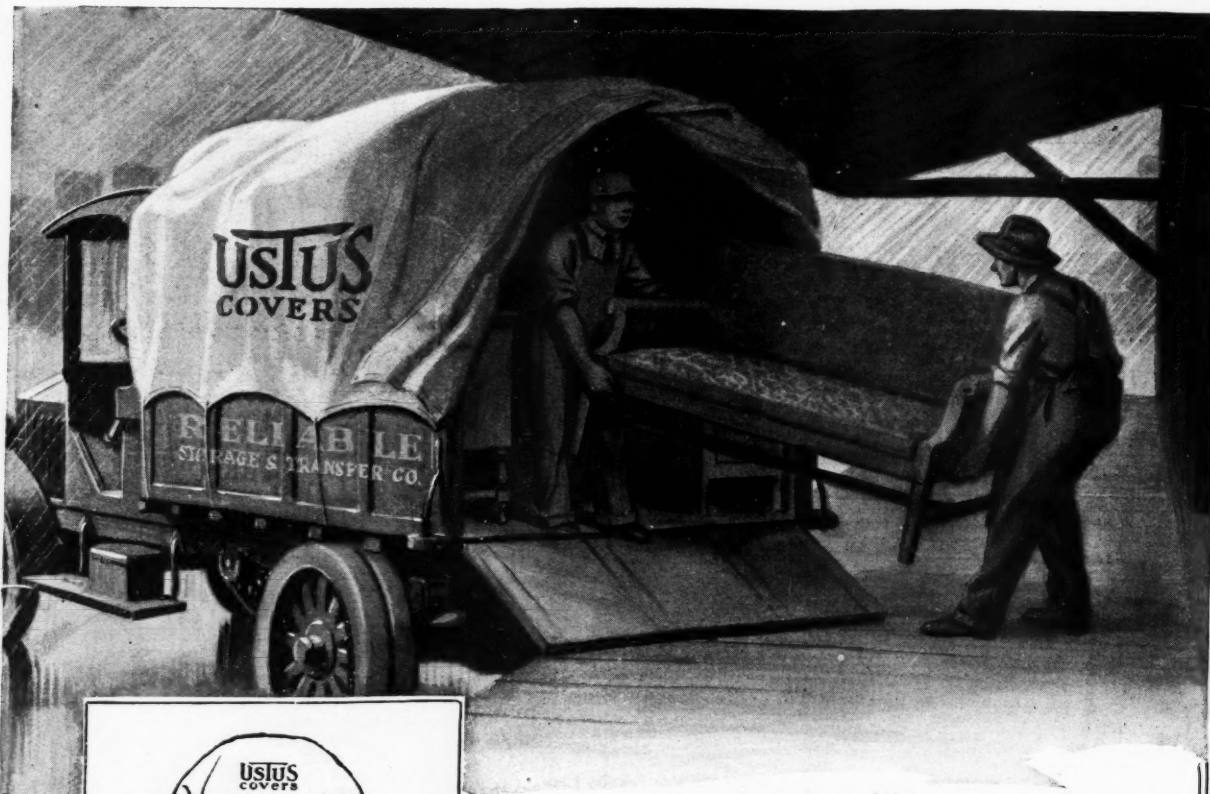
Something New for the New Year Through Consolidated Merchandise Cars to the West

Heretofore Western Railroad tariffs have not provided car load rates for mixed commodities. The new "Consolidated Classification," effective December 30, 1919, authorizes such rates. This enables us to quote reduced freight rates to the Merchants and Manufacturers of the East on shipments of a great variety of articles which will be consolidated into complete car loads and forwarded direct without breaking bulk, to Distributing Centers in the West; thus not only effecting a substantial saving in freight cost, but affording quicker time and eliminating transfers en route.

This new feature of our business will receive the same care and attention which built up our Consolidated Car Service in shipments of Household Goods, Automobiles, etc., so favorably known and largely patronized by Warehousemen and Shippers.

For information write nearest office

**Judson Freight
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Covers for Building Materials, Grain Sacks, etc.



Truck Covers



The USTUS Limousette for Fords transforms the open Ford into a substantial sedan. It provides clear vision and can be attached instantly and without alterations of the standard Ford top. Price \$46.00 for Ford Touring Car, \$30.00 for Ford Roadster, f. o. b. Detroit, Mich.

USTUS Covers Insure Clean Delivery Records

Upon your ability to deliver goods entrusted to your care free from damage, depends your reputation and profits.

USTUS covers safeguard the goods, you carry, in transit against pelting rains, driving sleet and dust. Sudden storms are reckless and spell damage to uncovered furniture and perishables.

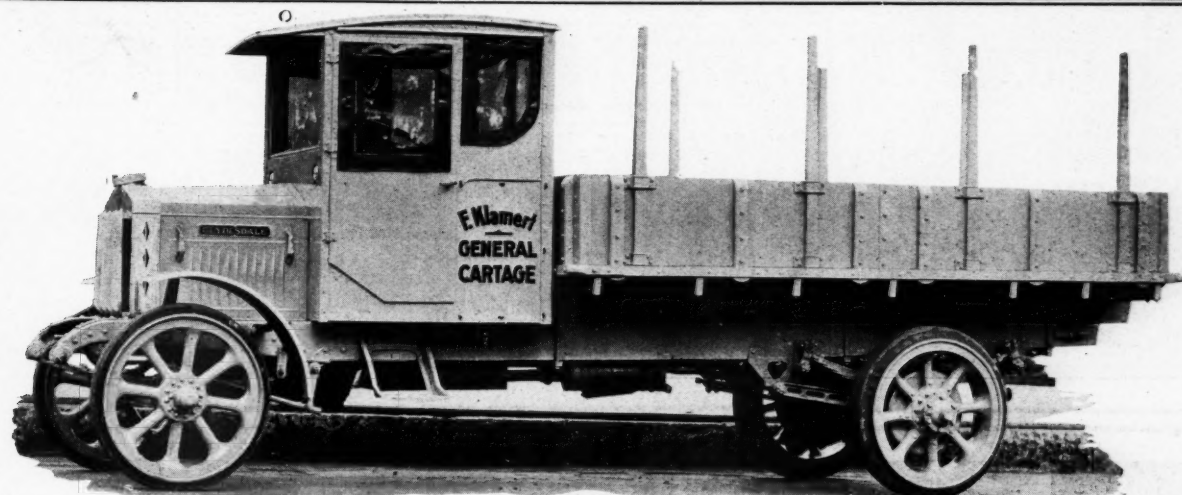
You can have the advantages of the covered van from your open trucks and cartage vehicles by equipping them with USTUS Covers.

USTUS covers are made of strong, closely woven standard fabrics. They are especially treated so they will not crack in folds in freezing weather. Reinforced edges and corners prevent wear and give long life and they are guaranteed to give satisfaction.

There is a USTUS cover for all covering purposes and they are made in standard grades from USTUS guaranteed materials.

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1102 W. Jefferson Avenue, Detroit, Michigan
Chicago Office: 35 South Dearborn, PETER N. JANS, *Manager*

"USTUS Covers Them All"



It Sounds Unusual —It Is

It *is* unusual for such a sturdily constructed truck as the Clydesdale to be directed with more than human intelligence by a simple little instrument which you can hold in one hand.

And "The Driver Under The Hood" (the little instrument found only on Clydesdale trucks) will hold the truck to the same speed up hill, down hill, through mud or sand, without changing the throttle or accelerator. In addition to this wonderful feature Clydesdale has the reputation of eight years' production of motor trucks which stand up under the roughest kind of service.

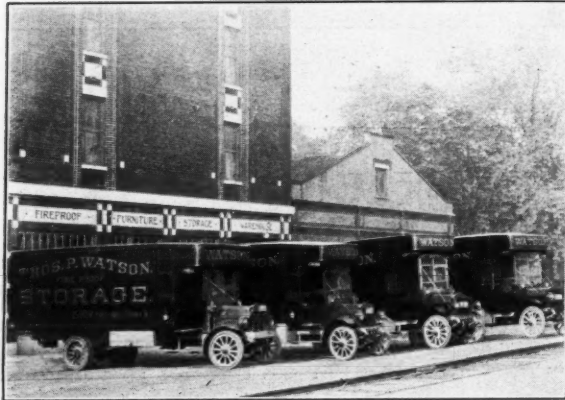
Transfer and Storage Companies all over the country have chosen the Clydesdale equipped with the "Driver Under the Hood" as best fitted for their business.

We know that our claims are unusual but we want you to ask us for proof. We want you to see the things we speak of. Write us for the name of the nearest dealer so we can arrange a demonstration of this unusual truck.

One to Five Tons Net Load

THE CLYDESDALE MOTOR TRUCK COMPANY, CLYDE, OHIO

CLYDESDALE



Another
FEDERAL

These Federals have a splendid record of service in the transfer line.

FEDERAL

Moving Household Furniture 250 Miles by Motor Truck

Thomas P. Watson, moving and storage, East Orange, N. J., would be surprised if his fleet of four Federal trucks, or any one of them, was to develop even a slight trouble on the 500 mile round trips which they frequently make between East Orange and such points as Washington, D. C., and Boston, Cape Cod, Vermont, Rhode Island, and other New England cities and states.

"On every trip," he says, "our trucks have returned promptly and in good order, averaging 150 miles a day."

Some idea of the hard grind to which Mr. Watson's trucks are subjected may be gained from the fact that the tires on his first Federal, purchased 18 months ago, have been replaced three times since that time. His second truck, seventeen months old, has in that time cost him for repairs only \$1.20 for a new steering pin, although it has been on the road daily and run approximately 17,000 miles.

It is significant that the success of Mr. Watson's first two Federals led him to purchase two more—which is so common among Federal owners that it has resulted in the slogan "Another Federal."

FEDERAL MOTOR TRUCK COMPANY
57 FEDERAL STREET
DETROIT, MICH.

"Shorten the Miles to Market" — "Use Motor Trucks"

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UNDER THE ACT OF MARCH 3, 1879.

PUBLISHED MONTHLY

Volume XIX

CHICAGO AND NEW YORK, JANUARY, 1920

No. 1

Pals!



Drawn by Leo Joseph Roche.

* * * "and as time goes on they'll look back and realize more and more what that Cincinnati Convention meant to them."

Beginning in the

FEBRUARY ISSUE

of

DISTRIBUTION & WAREHOUSING

“HISTORICAL SURVEY

of the

DEVELOPMENT OF THE WAREHOUSE”

By

Charles H. Moores

Moores & Dunford, Warehouse Engineers

“The warehouse,” writes Mr. Moores, “is the foundation upon which all trade was built and upon which the complicated structure of the commerce of modern times still stands.”

This is a human interest story of warehousing from the biblical period, through the ages, down to the present day. The warehouseman who reads it will possess a broader vision of the public necessity of the storage plant. The banker, the manufacturer and the investor who reads it will come to know the true value of the warehouse in the world of commerce.

PART I (in the February issue):

Warehousing at the dawn of civilization.—In the days of the Persian Kings.—Of Rome.—Through the Middle Ages.—The warehouseman as a banker.—The warehouse deficiency during the World War.

PART II (in the March issue):

Types of warehouse—Merchandise; household goods and furniture; implement storage and transfer; cold storage; port and railroad terminal; special—Bonded warehouses.

OTHER ARTICLES BY MR. MOORES, DEALING WITH SPECIAL PHASES OF THE WAREHOUSE INDUSTRY, WILL APPEAR IN DISTRIBUTING & WAREHOUSING DURING 1920.

TRAFFIC MEN ORGANIZE COMMITTEE TO PROMOTE NATIONAL ASSOCIATION FOR COOPERATION WITH THE WAREHOUSE INDUSTRY

Get-Together Movement Successfully Launched at Cincinnati to Continue During
Coming Months With View to Arranging Joint Convention of Storage Execu-
tives and Manufacturers' Representatives in December—American
Warehousemen's Association at Annual Meeting Inaugurates
Campaign to Effect Universal Adoption of Standardized
Basis for Making Rates to Assure Higher Returns
on Business Investments—Many Other
Important Topics Discussed

THESE were the outstanding features of the twenty-ninth annual convention of the American Warehousemen's Association at Cincinnati on December 10, 11 and 12:

FOURTEEN POINTS.

1.—Nine traffic executives representing either manufacturers who distribute through warehouses or forwarding companies which use warehouses for distribution, organized a permanent committee. This committee during the coming ten or twelve months will conduct a propaganda campaign among industrial traffic men throughout the country in an endeavor to sell them on the value of organizing a national association of traffic managers. Such an association would either become affiliated with the American Warehousemen's Association as a sub-division; or it would operate independently—but in either case its purpose would be to co-operate with the American Warehousemen's Association. Its members would hold a joint convention with the American Warehousemen's Association next December, meanwhile meeting by itself to determine whether greater benefit could be obtained for its members through affiliation or through remaining an independent unit. The object in forming such a national association would be to place manufacturers and their employees who handle warehouse accounts in an organized position to deal with the warehousemen in establishing standardized forms and practices for their common prosperity. This is the first time in the history of American warehousing that manufacturers and warehouse men engaged in merchandise distribution have undertaken a co-operative movement.

2.—The Committee on Standardization of Basis for Rates determined its activities after several years of work and in its place was selected a committee representing each of the three sub-divisions of the American Warehousemen's Association, with a general committee representing the Association itself. These committees, in conjunction with the Association's central cost accounting bureau established some months ago at Pittsburgh, will work to have warehousemen generally throughout the country adopt the methods practiced by many Massachusetts warehousemen of devising a basis for making rates based on, among other things, labor conditions, property investment, general overhead expenses, depreciation of holdings, repairs, advertising and taxation. Adoption of this system universally would mean higher rates for industrial traffic managers to pay for distribution, and higher charges for the storing and handling of foodstuffs in cold storage and household goods in dry storage. Two objects of this campaign would be: first, to prepare rate information which would serve as a basis to bringing up "to a proper level, and defending," rates before any body of shippers or any Federal or State regulatory commission; and, second, to make the American Warehousemen's Association "a powerful ally to the individual warehouseman."

3.—The directors of the American Warehousemen's Association were authorized to decide on the advisability of preparing jointly with the American Bankers' Association a propaganda pamphlet setting forth the safety and advantage of standardized negotiable warehouse receipts for collateral, with suggestions as to

CINCINNATI CONVENTIONS

their proper use and handling. This pamphlet would be distributed among banks and trust companies throughout the United States and Canada. The directors will decide also whether a campaign of advertising in bankers' journals should be conducted in order to bring the negotiable receipt question more intimately to the attention of the financial world.

4.—The household goods sub-division decided not to withdraw from the American Warehousemen's Association. Delegates representing sectional, state and city associations of furniture warehousemen met at White Sulphur Springs, West, Va., prior to the Cincinnati convention and voted in favor of a national body to be made up of members of the individual organizations. The latter will ratify or reject this proposal. If ratified, a convention will be held, probably in July, for the purpose of organizing, and another convention will be held in December jointly with the next meeting of the American Warehousemen's Association. Meanwhile the sub-division of the parent body continues in existence.

5.—The cold storage sub-division adopted resolutions under which it will oppose enactment of the proposed Federal cold storage bill unless amendments or changes are made which will nullify provisions held by the cold storage and poultry industries to be harmful.

6.—The committee on laws and legislation announced it would work to have the Legislatures of New Hampshire, South Carolina, Georgia, Mississippi, Kentucky, Indiana and Arizona together with Porto Rico, adopt the warehouse receipts act which has been enacted by all the other States.

7.—Decision was deferred on the question of bringing up with the Congress at the present time the taking of a special inquiry of the warehouse industry in connection with the Fourteenth Decennial Census. Opinion was expressed that the Bureau of the Census would favor making such an inquiry three years hence if Congress was then requested to authorize it.

8.—The committee on railroads and steamships recommended that the American Warehousemen's Association members agitate to have railroad warehouses divorced from the control of the carriers. The practices of the carriers in utilizing railroad warehouses were declared to comprise "a form of commercial rebate" with resultant loss to public storage plants.

9.—It was disclosed that at the time the Armistice was signed the Government was about to regulate the warehouse industry. A committee representing the

American Warehousemen's Association, discussing with Washington officials the subject of complaints regarding warehouse charges, had convinced the Government investigators that the Massachusetts system of bases for rates was a fair one, and regulations founded on this system were about to be installed when the war ended.

10.—It was brought out that Government authorities today are apparently planning to open Government wartime storage bases to commercial warehouse uses.

11.—The household goods sub-division's committee on uniform methods of accounting recommended to the furniture storage men a cost accounting system designed to enable them to revise their business methods and earn larger profits.

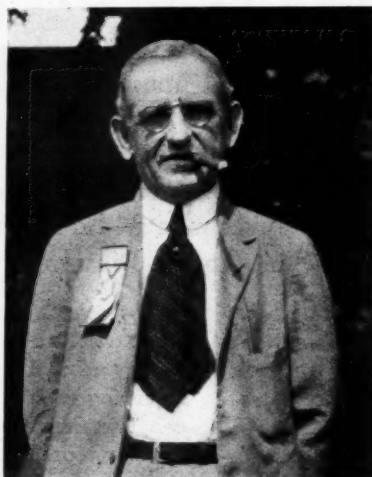
12.—The Ohio members at the convention met and organized the Ohio Warehouse and Transportation Association, which, to include distributors and truck companies, will work for better warehousing, highway and legislative conditions.

13.—The cold storage sub-division adopted a resolution under which it will be represented by a committee of five members at meetings of the American Association of Refrigeration.

14.—The traffic managers during their stay in Cincinnati visited local warehouses and had individual talks with American Warehousemen's Association members; some of them arranged for distribution contracts at warehouses in various parts of

the country. Men in both industries declare that, aside from the value of the co-operative movement which was put under way, the gathering was productive of enough new business to repay many times over the cost of making the journey from their respective cities to Cincinnati.

It was not one convention which met. Besides the general meeting of the American Warehousemen's Association, the individual gatherings of the three sub-divisions, the assembly held by the traffic managers and the meeting of the Ohio members, the American Chain of Warehouses held its eighth annual convention on December 9 and discussed cost handling, good roads, insurance, advertising, and expansion of its co-operative activities. All meetings were held at the Hotel Gibson. An account of the American Chain of Warehouses' convention will be found on page 50I. An account of the general session, the traffic managers' meeting, the merchandise sub-division, the cold storage sub-division and the household goods division meeting will be found elsewhere in this issue.



JAMES F. KEENAN

*Elected President of the A. W. A.
Mr. Keenan is a member of the
Haugh & Keenan Storage & Transfer Co., Pittsburgh.*

CINCINNATI CONVENTIONS

TRAFFIC MANAGERS

HOPE TO ORGANIZE A NATIONAL ASS'N.

FIRST official mention of the coming of the traffic managers was made by Mr. Lovejoy at the Tuesday convention of the American Chain of Warehouses. In his report as president of the A. W. A. at the opening of the A. W. A. convention Mr. Lovejoy expressed opinion that warehousemen and traffic managers by getting together would "probably both see the error of our ways." He urged that the members extend every courtesy to the manufacturers' representatives and thought that one fruit of the meeting would be the formation of a national association of traffic men who distribute through warehouses.

Alton H. Greeley, discussing merchandise distribution through warehouses, urged the A. W. A. members to put into practice the constructive ideas advanced at the convention, declaring that those who did not do so, particularly the ideas relating to uniformity of practices, would do an injustice to those members who were trying to bring about uniformity. "The traffic managers here will pick out the easy marks and impose on them," Mr. Greeley said. "Charges must be made commensurate with the service rendered. Where goods do not go into the warehouse but are distributed, reasonable charges should be made."

Mr. Lovejoy told the traffic managers they had "a mighty good opportunity to do good in discussing various subjects and to relieve their minds" while the convention was in progress.

"We warehousemen," Mr. Lovejoy said, "are not in business for our health alone. A traffic manager representing a Syracuse manufacturer wanted to store five carloads of table salt with me. I quoted the Massachusetts rates. The traffic manager said: 'No, salt's too cheap.' I said: 'But my warehouse is not too cheap. I'll store your salt only at those rates.' The traffic manager went to Syracuse. He came back two or three weeks later and agreed to store at the rates quoted by me. 'What has

changed your mind?' I asked. The traffic manager explained that his president told him that Lovejoy was perfectly right, as wages, overhead and other costs had advanced. The traffic manager said his president told him: 'My own labor cost has advanced. It's got to go into the salt. Salt can't be a cheap article any longer.'"

Mr. Lovejoy remarked that "one great trouble with the traffic manager is that the proper shipping instructions are not given or the goods are shipped wrong." He suggested that the traffic manager consign goods to his own name, care of the warehouse, with the route of movement specified. "I operate eleven warehouses in Boston," Mr. Lovejoy explained. "In most instances the goods consigned to me direct are landed at the wrong warehouse and it costs from five to eight cents a hundred pounds extra to get it to the right one. The man who ships the goods should hold possession of them. This is one of the essential things in the consignment of goods."

Joseph R. Behrens, of New Orleans, said the trouble was that cars were not handled right at points of origin—that the proper rates, weights and amounts paid were not marked on the bills of lading. Sometimes additional charges were then assessed by the railroads and claims for refund must be made. Co-operation by the shippers was necessary, Mr. Behrens declared—they should furnish the warehousemen with mani-

fest of contents of cars showing where and to whom the cars are to go; if that information is not sent in advance, it delays matters, he said. Each bill of lading should show also each car number and the routine, he added.

At this point Mr. Lovejoy appointed a committee to represent the A. W. A. to confer with the traffic managers present. This committee and the traffic executives retired to a room at the Old Colony Club and held a conference while the A. W. A. convention was continuing its deliberations. Mr. Greeley was chairman and Frank



FRANK E. JONES

***C**HOSEN by the traffic managers and forwarding company representatives who met at Cincinnati as Chairman of their permanent committee organized to awaken interest among traffic men during the coming months with the idea of organizing a national association of traffic executives who distribute merchandise through warehouses. Mr. Jones is traffic manager of the Furniture Manufacturers' Association of Grand Rapids, Mich.*

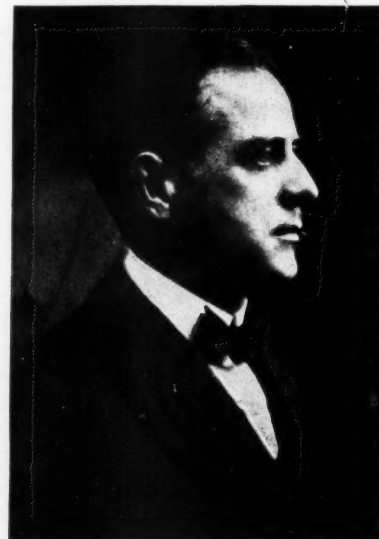
CINCINNATI CONVENTIONS



C. J. YATES



H. B. RUBEY



JOHN J. SINNOTT

THREE members of the permanent traffic men's committee organized at Cincinnati. Mr. Yates is traffic manager of the Vick Chemical Co., Greensboro, N. C. Mr. Sinnott is traffic manager of the F. F. Dalley Corporations, Inc., Hamilton, Canada. Mr. Rubey is traffic manager for the P. W. Drackett & Sons Co., Cincinnati.

Rochambeau, New York, was secretary at the Old Colony conference. Other warehouse representatives included A. H. Millward, Chicago; John F. Weis, Rochester, N. Y.; L. T. Crutcher, Kansas City, Mo.; P. F. Cassidy, Chicago; William E. Halm, New York; W. W. Morse, Minneapolis; S. M. Haslett, San Francisco; John Bekins, Omaha, and G. H. Hansen, Milwaukee. The traffic representatives present included F. E. Jones, traffic manager, Furniture Manufacturers' Association of Grand Rapids, Mich.; D. R. Sherwood, Proctor & Gamble Co., Cincinnati; Chester A. Webster, Colgate & Co., Jersey City; J. J. McVady, assistant traffic manager, Indian Packing Co., Green Bay, Wis.; C. J. Yates, Vick Chemical Co., Greensboro, N. C.; Thomas A. Bradley, New York, president of the Acme Transfer & Storage Co., Inc.; Herbert N. McEwen, St. Louis, general manager of the Acme company; H. B. Rubey, traffic manager, the P. W. Drackett & Sons Co., Cincinnati; John Simon, manager of transfer department, Keystone Steel & Wire Co., Peoria, Ill.; L. B. Vogelsang, traffic manager, Whitaker Paper Co., Cincinnati; John J. Sinnott, F. F. Dalley Corporations, Ltd., Hamilton, Canada; and C. L. Connors, Postum Cereal Co., Cincinnati.

Mr. Greeley told the traffic representatives it was the desire of the A. W. A. to co-operate with traffic managers throughout the country in order to effect better understanding of problems of mutual interest. Lack of close co-operation was largely responsible for the controversies, he said, and there must be more intimate contact. He described the organization plan which he has placed in

operation at his own plant, the General Cartage & Storage Co. of Cleveland, explaining how his co-operative methods made for better service. Regarding the conference he told the traffic managers:

Criticisms Welcomed

"We want criticisms, no matter who is hit. We are all here to learn."

The first subject discussed was whether a fair charge should be made by the warehouseman for advancement of freight charges on incoming freight. Speakers for the warehouse industry said this service was worth a charge—that banks charge interest for the use of this money and so it was only fair for the warehouseman to charge.

Discussing the question of consigning, the warehousemen said goods should be addressed to the shipper in care of the warehouseman, so cars could be spotted easily under circumstances where warehouseman has several plants. If a car consigned to warehouseman is lost, it is up to the warehouseman to file the claim, the storage man contended. Traffic representatives did not agree with this, saying it was the practice for the warehouseman to sign a waiver of filing claim and send the claim back to the shipper. The traffic managers asserted further that it had been their experience that the warehouseman directs the shipper to consign cars direct to the warehouseman and not in the name of the shipper in care of the warehouseman. Traffic representatives said it was news to them that warehousemen wanted goods sent addressed to the traffic man.

CINCINNATI CONVENTIONS

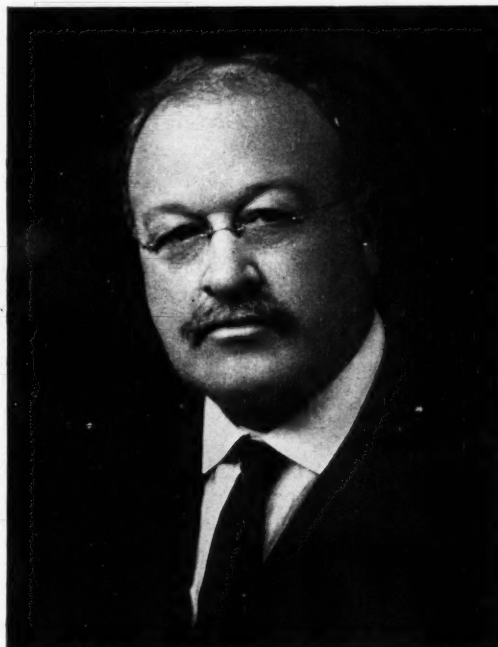
Warehouse speakers declared it is the duty of the traffic manager to notify the storage man in advance that a car is coming unless the car is addressed to the traffic man in case of the warehouse—that this would better conserve the interests of both parties. It was brought out by warehouse speakers that the railroads request the warehousemen to pay freight charges within twenty-four hours; if the goods are not delivered they are held subject to shippers' payment.

Traffic executives expressed opinion that the subject of direct consignment addresses should be made a matter of circularization by the A. W. A. among its members so that a uniform practice could be decided upon. Several traffic representatives said that if the A. W. A. would work out such uniformity, the shippers would be glad to carry out the warehousemen's desires. Several warehousemen present were of the opinion that the entire A. W. A. membership should be canvassed to this end. One traffic executive declared that no warehouseman with whom he had come in business contact during the past ten years had ever brought the question to his attention, he saw no objection, however, to arranging uniformity. It was suggested that Secretary Criss of the A. W. A. submit a referendum to the members to determine their opinions.

The consensus of opinion of those present appeared to be that shipments should be addressed to the name of the shipper in care of the warehouseman.

Character of Papers

The question was discussed as to what papers the distributors should furnish to the warehouseman before the car arrives. Warehousemen asked for manifest; bill of lading, including a regular form whether goods were for distribution or for storage only; and bill of lading for out-bound goods attached if goods were for distribution in less than carload lots. If the distributor forced the warehouseman to make out documents after arrival for goods, the warehouseman could properly make a charge for this service, the storage men contended. Traffic representatives



GEORGE S. LOVEJOY

Elected Vice President of the A. W. A., of which he has been the President during the past six years. Mr. Lovejoy is general manager of the storage department of the Quincy Market Cold Storage & Warehouse Co., Boston.

replied that a practice of attaching bills of lading for out-bound less than carload lots would tend to kill the l.c.l. charges. Warehouse speakers in reply pointed to the clerical work, manual labor and other fundamentals which cost money.

"We must endeavor," said Mr. Greeley, "to arrange by some fair means an economical and fair adjustment so that a fair basis can be established. You traffic managers must in some measure lean our way. We should be paid a fair amount for each service which we perform."

In response to a question by a traffic manager, it was brought out that the warehouseman is accustomed to make a charge for stenciling when goods are to go forward to another point; but that no such charge is imposed if goods are to go into storage or if a city team backs up at the warehouse to take goods away.

A traffic manager declared that the warehousemen "by piling up all these incidental charges may kill the goose that lays the golden egg. The incidental charges may amount to more than the money which the shipper may save on the spread in rates. They may kill l.c.l. shipments. The warehouseman should embrace everything in a single charge and thus encourage l.c.l. shipments."

Bills of Lading

It was brought out that unloading, storing, stenciling and bill of lading charges are in many instances made as individual assessments, and traffic managers said they preferred all to be included in one bill.

Traffic representatives declared that the bill of lading was "such a small feature" that the warehouseman ought not to charge for it. Warehousemen replied that shippers ought not to expect the storage man to make out the bill of lading—that this was the traffic man's duty, and that by doing it the tendency would be to avoid errors. The point was made by warehouse speakers also that the cost of clerical labor was not a small one. Agreement was reached that some uniformity of practice ought to be effected.

Discussing "How should unloading reports be handled?"

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traffic managers insisted the warehouseman should furnish a receipt. Warehouse speakers suggested that each receipt be prepared in triplicate form, one copy going forward to the warehouseman to help him do what the traffic manager wants. Traffic executives declared that much of the trouble originated with the fact that the warehouseman did not go far enough in informing the traffic man how co-operation could best be obtained.

The question of outbound freight charges was again brought up and traffic men reiterated that individual charges for various services performed were not welcomed but that a general charge should cover all.

Discussing freight extension, traffic managers said the warehouseman should check extensions if a charge was made for making out freight bills. One warehouseman said this would cost him \$50 monthly in payment for clerical services.

Monthly stock reports were considered. Mr. Greeley told the traffic managers that stock checking should earn a charge which the shipper should pay. Discussion disclosed that warehousemen have been doing a great deal of this work without receiving remuneration.

One warehouseman said he was once accustomed to furnish a daily report, supplemented by a monthly report based on the daily one; that finally he requested the shipper to prepare a triplicate form, one to be kept by himself and two to go to the warehousemen, who retained one and sent one back to the shipper later for purposes of comparison. This system, the speaker explained, served to simplify their business. The stock list sent at the end of each month served as a check, also, as the lot numbers on the list were arranged serially; and so much of the confusion was eliminated. Several traffic managers present expressed a willingness to accept this system, which has for eight months been in operation at the warehouse where it was devised. Warehousemen declared, however, that the monthly reports should be on the storageman's own forms; these reports would be free, they said, but traffic managers should pay for any extra stock report service they demanded, and should pay also for making out tax reports, affidavits and similar documents.

It was generally agreed by both sides that it would be difficult to devise a standard form for monthly reports; it was held that the multiplicity of system would make uniformity virtually impossible.

Discussion of damage claims showed that there was general agreement that the traffic managers did not desire the warehouseman either to file claims or to try to enforce them. This was held to be within the province solely of the distributor.

Several traffic men expressed opinion that some warehousemen were "rather lax" in notifying shippers regarding freight shortages. Warehouse speakers insisted that "high class warehousemen" always made such reports, with bills of lading attached, and accompanied by a railroad statement certifying as to shortage or damage. It was agreed by both sides that warehousemen should follow this practice, after traffic representatives had pointed out that this was not uniformly done.

Warehouse speakers conceded that there should be a clear understanding as to the warehouseman's responsibility for goods shipped after the railroad has received the storageman's receipt. Traffic representatives declared that all warehousemen were not acting squarely in regard to responsibility. The traffic men were requested to inform the A. W. A. in every instance where any member might try to avoid responsibility. Traffic speakers said the evasion was usually committed "in small towns."

One traffic manager declared that "the carriers are ducking more and more from responsibility for concealed damage." When a warehouse speaker expressed belief that "this would change after January 1" a traffic man said he did not think so. It was brought out that many railroads "pay under protest" if continued pressure is brought to bear, properly supported by affidavits from reput-

able witnesses. One speaker thought that the only way out of this difficulty was to "be a sport and toss a penny with the railroads."

In response to a traffic man's query, warehouse speakers declared the storage man was entitled to all overage, particularly where he has paid the shortage claim. It was brought out that some warehousemen have provisions in their regulations under which they agree to replace shortages with correct material, and thereafter they may either become owners of all overages or the shippers are to make fair payment to have the overages returned, and the warehousemen will then make payment for the shortages.

"In the absence of any agreement, fairness and good business should rule, with the overages considered as the



WALTER G. REID

Re-elected Treasurer of the A. W. A. and chosen chairman of White Sulphur Springs meeting which planned the organization of a national association of furniture warehousemen. Mr. Reid is associated with the Lincoln Safe Deposit Co., of N. Y.

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property of the warehouseman," said Mr. Greeley.

It was agreed that telephone communication by warehouseman to shipper regarding arrival of goods was unsatisfactory; notice should be sent by mail, with postmark on letter to regulate the beginning of the 48-hour period of the warehouseman's liability as a common carrier. Traffic managers said it was important that the shippers know when the warehouseman's responsibility terminated.

Distribution

The warehouseman's interpretation of the word *distribution* was explained to the traffic managers—unloading the shipment into the warehouse and on to the truck which backs up at the warehouse. Once the goods are on the truck, warehouse speakers explained, distribution ended; thence on the process became known as cartage and a separate charge was imposed. When a charge for a bill of lading in, to be included in the distribution expense, was made it proved to be a moot one. One warehouseman declared he had installed a \$450 machine for use solely in making out bills of lading, and he contended this service called for an extra charge—perhaps 5 cents for each bill. Traffic speakers contended the distribution charge should include all except charge for cartage. Warehouse representatives could not agree to this.

Traffic men said it was always important for the shipper to know when a car had arrived, even though unloading had not been begun. Several storage men objected to this practice, inasmuch as an unloading notice is always sent. For all notifications of this character, warehousemen said, the traffic manager should furnish forms. Discussion showed there was no uniformity. Warehouse speakers indicated their willingness to send car-arrival notices if shippers supplied cars and postage, and to notify by telegrams if shippers paid wire costs, these charges to be submitted monthly.

After the Old Colony Club meeting the conferees returned to the convention room, where Mr. Greeley explained to the convention at large the various agreements which had been reached by the warehousemen and the traf-

fic managers regarding what should be uniform practices.

"We have taken a fine step forward," Mr. Greeley said, alluding to the conference with the shippers' representatives. "I hope this work will be continued next year."

A suggestion that the traffic managers might be affiliated with the A. W. A. as a sub-division was referred to the executive committee, of which D. H. Van Name of New York is chairman.

Mr. Greeley read the list of the traffic men present, saying: "They are real traffic managers, too." He added that "results are going to be even more than we realize at this meeting."

One by one the traffic managers were called upon to

speak. Mr. Jones said he was certain better co-operation could be developed between shippers and warehousemen. "So many points have been brought up on which we can agree that I am sure the traffic managers will co-operate to the fullest extent," he said. Mr. McVady expressed his appreciation of having been invited and said it was his desire at all times to co-operate. Mr. Bradley said he had long believed a great deal of good could come out of a meeting between shippers and warehousemen, that he had been amply repaid for his journey, and that he hoped the co-operative movement would be continued. Mr. Yates said he had felt the traffic manag-

"The Fates Deceed—"

THE Fates decreed that the American Warehousemen's Association should not find it necessary at this time to elect a new president in place of James F. Keenan, chosen at Cincinnati as the association's executive head for the year 1920.

The Fates decreed this by sending the driving rod of a locomotive down an Ohio embankment when it might have wrenched a train on which Mr. Keenan was riding—with dire results to Mr. Keenan and to the Pittsburgh warehouse industry.

The train on which Mr. Keenan left the Cincinnati convention met with mishap. It was about a half-hour out of the Queen City, and en route toward Pittsburgh, when the great steel driving rod which connects the portside wheels of the engine tore itself loose.

The Fates decreed that it should not wreck the train. It might have smashed into the locomotive, upon which the train would have piled itself, as the train at the time was going forty-five miles an hour. Or the rod might have torn up the tracks, and the train would have toppled down the embankment into a ditch.

The Fates decreed, however, that the rod should move outward, instead of inward or downward, and it stuck its nose into a sandbank and stayed there while the engineer brought the train to a stop within its own length. This process somewhat jarred Mr. Keenan and the other passengers and the train arrived late at Pittsburgh.

ers were not always doing their part and that after he had visited many warehouses his company changed many of its forms to meet the wishes of storage men, in order to simplify the warehousemen's work. He urged the A. W. A. to work for uniformity of practices for the good of both shipper and warehouseman. Mr. Ruby said his company was strong for co-operation, because "co-operation means service" and service of the right kind was necessary to his firm. Mr. Simon said he came to the convention expecting to find chips on the warehousemen's shoulders—but found none. He emphasized the importance of personal contact by the shipper with the warehouseman two or three times a year. He hoped an organization of traffic managers would be formed. Mr. Sinnott declared that personal contact such as had been

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accomplished at the conference did more for co-operation in ten minutes than the writing of a hundred letters.

Traffic Men Hold Own Meeting

On the second day of the convention the merchandise sub-division did not meet and the traffic managers took this opportunity to hold a conference of their own in the Old Colony Club to discuss the advisability of organizing—either as a national association, independent of the A. W. A., or as a sub-division of that body. Mr. Jones was made chairman, and the others present were Messrs. Bradley, Yates, Rubey, McEwen and Sinnott. These organized a “co-operative advisory committee” for permanent work, and later there were added E. Stanley Grant, traffic manager, James B. Sipe & Co., Pittsburgh, and C. V. Wake, traffic manager, Hoosier Manufacturing Co., New Castle, Ind., who did not arrive in Cincinnati until the concluding day of the convention.

Mr. Greeley sat with the traffic managers for a short while. Regretting that a larger traffic representative was not present, he said the information and personal contact arising out of meeting with the traffic men had been invaluable and he believed some sort of a traffic association ought to be organized.

“Conditions are changing,” he said, “and it is necessary for us to keep close together. We have no intention to charge rates which are not just, fair and reasonable. Some plan for permanent co-operation ought to be worked out.

“The American Chain of Warehouses is a sort of commercial body. We meet in the same city as the A. W. A. one day prior to the A. W. A. convention and hold a round-table discussion of business conditions. I want to give you traffic managers this thought—that if it is not considered feasible by the A. W. A. for you to affiliate with that body, then you may wish to organize in some way in co-operation with the Chain. However, I hope the A. W. A. will take you in as a sub-division, to meet when other sub-divisions meet. I hope some such understanding may be worked out, but if one is not then I hope you will organize among yourselves. The Chain and the A. W. A. are friendly, and it makes no difference to us with which one you may affiliate.”

Action to be Tentative

Several traffic managers brought up the point that whatever action was decided upon it must be solely tentative, because most of the traffic representatives were after all only manufacturers' employees and each must report back “to the big boss.”

After Mr. Greeley had retired the traffic men continued discussion of organizing. It was emphasized that it was not always the traffic manager who handled the warehouse account, and that any organization formed should

include sales managers in charge of pool car distribution. Opinion was expressed that if the traffic men were to affiliate with the A. W. A. the initiative should come from the warehousemen. The coal car shortage situation was held responsible for the fact that a larger number of traffic representatives did not come to Cincinnati.

Wisdom of Organizing

Mr. Jones said he could not see the wisdom of organizing a national association at this time but that preliminary work could be done by a small committee during the next ten or eleven months so that a larger traffic delegation could visit the next A. W. A. convention for the purpose either of organizing or affiliating with the A. W. A.

This question could well be placed before the traffic clubs throughout the country, Mr. Bradley said. Through personal influence among traffic men and by bringing the situation to the attention of the National Industrial Traffic League and other traffic organizations, he suggested, the way could be paved for forming a national association of traffic men dealing with warehouses at the next A. W. A. convention. Mr. Jones agreed that the benefit of the best advice of traffic executives should be sought.

The name “Distribution and Warehousing Sub-Division” was suggested should the traffic men ever affiliate with the A. W. A.

It was agreed that a mistake had been made in not getting the traffic managers together before now. It was declared that increased rates being charged by many warehouses were causing many traffic managers to discontinue using public warehouses and instead to establish their own storage plants.

High Rates Discouraged

“Nevertheless,” said one traffic representative, “it is a fact that shippers would rather use public warehouses for distribution. We must make the warehousemen understand that this is money in their own pockets. There must be no prohibitive rates charged by warehousemen. By organizing we can serve as a check on the storage men who are inclined to run wild on rates. If we have a strong organization we can serve our own interests, work harmoniously, standardize practices, and make it a fifty-fifty proposition with the warehousemen. The warehousemen can and will standardize 80 per cent of their practices if they have standardized forms submitted to them by a traffic managers' organization. The warehousemen will adjust their business to meet our demands. If the warehousemen get fair prices and get them uniformly their facilities to handle distribution will be increased 100 per cent. The warehousemen must be told of the necessity of adjusting their business to meet traffic managers' demands or they will lose our patronage.”

Criticism was voiced that some warehousemen do not

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JOHN SIMON



THOMAS A. BRADLEY



C. V. WAKE

THREE members of the permanent traffic men's committee organized at Cincinnati. Mr. Simon is manager of the transfer department of the Keystone Steel & Wire Co., Peoria, Ill. Mr. Bradley is president of the Acme Transfer & Storage Co., Inc., New York. Mr. Wake is traffic manager of the Hoosier Manufacturing Co., New Castle, Ind.

handle intelligently the business of sending in bills.

"The warehousemen need a traffic bureau, with a salaried man to instruct them on handling pool car distribution," said one traffic manager. "Not 1 per cent know their own liabilities. Every warehouseman should handle business as though the traffic manager had a sales agent on the job at the warehouse to protect the shipper's interests. If the warehouseman acts as our agent, as he claims to do, he should give the same service and the same protection as though the traffic manager himself was at the warehouse."

Another traffic representative said: "We've got to study the warehouseman—who he was and where he came from. In many instances his father and his grandfather were warehousemen before him and he has their antiquated methods. Not one in thirty-five has any knowledge of traffic conditions. How many of the warehousemen would you want in your traffic department as your chief clerk?"

The Man Who Died

It was declared that the warehouseman who stores is not always the best one for the manufacturer to deal with; that often the one who does only distribution is better, as his service is cheaper because he has no overhead expense. One traffic manager remarked that warehousemen generally regard as an "outlaw" the warehouseman who does distributing alone and no storing.

"I know one warehouse company which for years did all its correspondence with pen and ink," said one traffic

representative. "One day a letter came which was typewritten. 'Old man Black is dead' I said to myself, and sure enough, I learned later that he was. The trouble is that there haven't been enough early funerals in the warehouse industry. The old-timers haven't died off and let the young blood in."

Conviction was expressed that the pool car business was certain to increase and that this would provide fine business for warehousemen. "The average warehouseman," said one conferee, "doesn't try to create new business. Every warehouseman should create a special distributing business and study the pool car phase. As it is now, most warehousemen take only what comes to them."

Uphold High Ideals

At the concluding session of the A. W. A. convention some of the traffic managers were present and Mr. Lovejoy spoke of their "high ideals" and told them that the association would like to be informed when and if any of its members did not conduct their business satisfactorily.

The organization of the committee of traffic men for work during the coming months was explained to the convention members and short talks were made by Mr. Sinnott, Mr. Grant and Mr. Wake.

The traffic managers while in Cincinnati were taken to the Chamber of Commerce by Mr. Rubey to become acquainted with the traffic work which that public body is doing.

(Continued on page 37)

HIGHWAY CONFERENCES

are the

WAREHOUSE FEATURES

of Chicago and New York

AUTOMOBILE SHOWS

SHOW DATES

New York

January 3-10

Cars: Grand Central Palace.

Trucks: 8th Coast Artillery Armory.

Chicago

January 24-31

Cars: Colliseum.

Trucks: International Amphitheatre.

THE highway transport conferences to be held in connection with the New York and Chicago automobile shows make these exhibits this year important for the warehouse and transfer industries as never before. Development of better highways tends to reduce the costs of distributing merchandise and moving household goods. The motor truck is becoming year by year a more increasingly essential factor in successful warehousing.

Every storage man who uses the commercial vehicle in this business will find himself repaid by attending, or sending his truck superintendent as his representative, the highway transport conferences and by examining the many makes of machines which, to be on display at the two truck shows, are adaptable for his particular line of business.

Many Important Conferences

The New York conferences will open on the evening of January 3 at the Eighth Coast Artillery Armory; and the Chicago conferences on the evening of January 24 at the International Amphitheatre. It is at these halls that the truck shows will be held, and shows and conferences will continue through the afternoons and evenings of all the show dates. From the viewpoint of costs and efficiency the exhibitions of trucks and their parts and accessories will be unprecedented. The highway transport conferences will have, as one feature, illustrations in the way of stereopticon and moving pictures; photographs and films dealing with motor transportation in all its phases will be shown.

The warehouses and transfer men or their truck superintendents will find of particular interest at the conferences the discussion of the truck in relation to "Designing Buildings, Terminals, Platforms, Etc., to Facilitate Motor Transport" by George H. Pride, president of the Heavy Haulage Company. Mr. Pride's paper will be read as part of the program headed "Aids to Motor Truck Efficiency."

This program includes also "Trailers," discussed by F. Van Z. Lane, transportation engineer, of the Packard Motor Car Company, and by Harry W. Perry, secretary of the Trailer Manufacturing Association; and "Pneumatic and Solid Tires," discussed by Alfred F. Masury, chief engineer of the International Motor Company, and by F. A. Whitten, chief engineer of the General Motors Truck Company.

Under the heading "Motor Truck and Railroad Freight-ing" the topic "Connecting Farms and Markets" will be discussed by United States Senator Arthur Capper of Kansas, and Harry S. Quine of the Goodyear Tire & Rubber Company. A paper on "Cost, Range and Service Comparisons" will be read by W. J. L. Banham, general traffic manager of the Otis Elevator Company. Warehousemen will be particularly interested to know that the discussion of this particular subject will be led by three traffic managers who use warehouses for distribution—D. M. Pomfret of Colgate & Company, James S. Carling of Arbuckle Brothers, and P. M. Ripley of the American Sugar Refining Company.

Discuss Motor Haulage Efficiency

"Rural Motor Express" in relation to "Its Advantages to the Shipper" will be discussed by Peter G. Ten Eyck, chairman of the New York State Highway Transport Committee, and J. D. Eggleston, chairman of the Highway Transport Committee of Iowa. This is a subject which is of interest to the warehouse industry generally and will be brought up on January 7.

Under the general heading "Increasing Motor Haulage Efficiency" the following program, set for January 6, will be of value to warehousemen and their truck superintendents—and to transfer men.

"Cost Accounting, Routing and Dispatching"—S. S. Merithew, Packard Motor Car Company; E. E. LaSchum, general superintendent of the American Railway Express; and H. W. Drew, Packard Motor Car Company. "Load-

AT the twentieth National Automobile Shows to be held in New York, January 3 to 10, and in Chicago, January 24 to 31, the motor truck will prove for all time that it has definitely arrived. Not that commercial automobile transportation is still in the debatable stage: far from it. But with a show all its own, with ample space, and with nation-wide interest in the transportation conference to be held in New York during show week, the truck will be able to tell its own story—to demonstrate its tremendous and significant value as a motor vehicle for merchandise distribution.

The slogan "ship by truck," is no longer an appeal. It is a description.

ing and Unloading Devices"—Joseph Husson, editor of *The Commercial Vehicle*; W. P. Kennedy, a consulting engineer. "Incentives for Drivers and Helpers"—Harold B. Weaver, a consulting engineer; Joseph K. Orr, Orr Transfer Company.

Highways and highway traffic will be discussed by men including Arthur H. Blanchard, professor in charge of highway engineering and highway transport, University of Michigan, and president of the National Highway Traffic Association; and M. O. Eldridge and George C. Diehl, respectively director of roads and chairman of the good roads board of the American Automobile Association.

Tom Snyder, secretary of the Indiana Transfer and Warehousemen's Association, and secretary of the highway transportation division of the Indianapolis Chamber of Commerce, will discuss motor express operation; as will F. W. Fenn, secretary of the motor truck committee of the National Automobile Chamber of Commerce, and other authorities on this subject. Other speakers at the conferences will include Ray Sherman, editor of *Motor World*, and F. E. Erstman, executive secretary of the Motor Truck Owners' Association.

Show Seventy Different Makes

At the truck shows approximately seventy different makes will be displayed. This is declared to be the largest number of exhibitors and the most complete exposition of the industry in the history of the automobile. The truck makes to be shown include:

Acason, Acme, Ace, Armleder, Atterbury, Autocar, Bethlehem, Brockway, Clydesdale, Commerce, Corbitt, C. T. Day-Elder, Defiance, Denby, Diamond T., Dodge Brothers, Dorris, Federal, Graham, Huffman, Hurlburt, Indiana, International, Jackson, Jumbo, Kelly, Keystone, Kissel, Koehler, Maccar, Master, Maxwell, Nash, Oldsmobile, Oneida, Packard, Paige, Pierce-Arrow, Rainier, Reo, Republic, Rowe, Sandow, Sanford, Schact, Schwartz, Selden, Standard, Sterling, Stewart, Sullivan, Tower, Trailmobile, Transport, Three Point, Triangle, Union, Velie, Vim, Walker, Walter, Ward, Ward La France, Wilson and Winther.

TRUCK VS. HORSE

IT is estimated that 1,200,000,000 tons of goods are hauled yearly by motor trucks at a cost of an average of 15 cents per ton," to quote one automobile authority. "This gives us a total of \$118,000,000 for moving the above tonnage.

"In comparing these figures with that of wagons and horses, we find that the cost of maintaining and operating horse teams is 33 cents per ton mile, which, if correct, gives a saving of \$216,000,000 per year in favor of the motor truck.

"While there are only 800,000 motor trucks in the United States today, it is expected that there will be at least 1,000,000 in use the first part of the year of 1920, so you see that the transportation equipment of the country is sure to prove adequate for demands, with this help from the motor truck."



Motor truck distribution through Boquet Canyon, California—This picture illustrates also the need for better highways

MOTOR TRUCKS HELP DISTRIBUTE WORLD'S LARGEST SHIPMENT

FORTY motor trucks handled within five days the greatest single shipment of any commodity ever made by one shipper.

Moving like swift ants through the streets of New York, Brooklyn and Jersey City, this fleet of vehicles, operated by the Williams Shipping Agency, completed this herculean undertaking on the morning of November 28 after having transported 8,435,000 pounds of crude rubber valued at 52 cents a pound, or a total of \$4,412,000.

The movement of this rubber represented one of the biggest distribution accomplishments in America's industrial history—and it could not have been successfully done within the short space of five days without the aid of the motor truck.

The Williams Shipping Agency, of New York, handled the rubber for the Goodyear Tire & Rubber Company, which had imported it from abroad on seven steamships

in consignments ranging from 1,500 to 15,000 cases—in all, 42,425 cases with an average of 200 pounds to the case. Ordinarily these shipments would have been handled one at a time at the New York waterfront; but because of the longshoremen's strike the discharge of cargo from vessels was delayed, so that it became necessary for all seven steamships to be unloaded simultaneously when the strike terminated.

The seven vessels were at as many different parts of the waterfront, and the motor truck fleet of the Williams Shipping Agency was distributed at the seven points, and at a concentration landing place to which lighters brought some of the rubber at Jersey City. From the seven vessels direct, or from the Jersey City landing where the lighters tied up, every case of the huge shipment was transported by motor truck to the Jersey City yards of the Lehigh Valley Railroad Company. There the rubber was placed

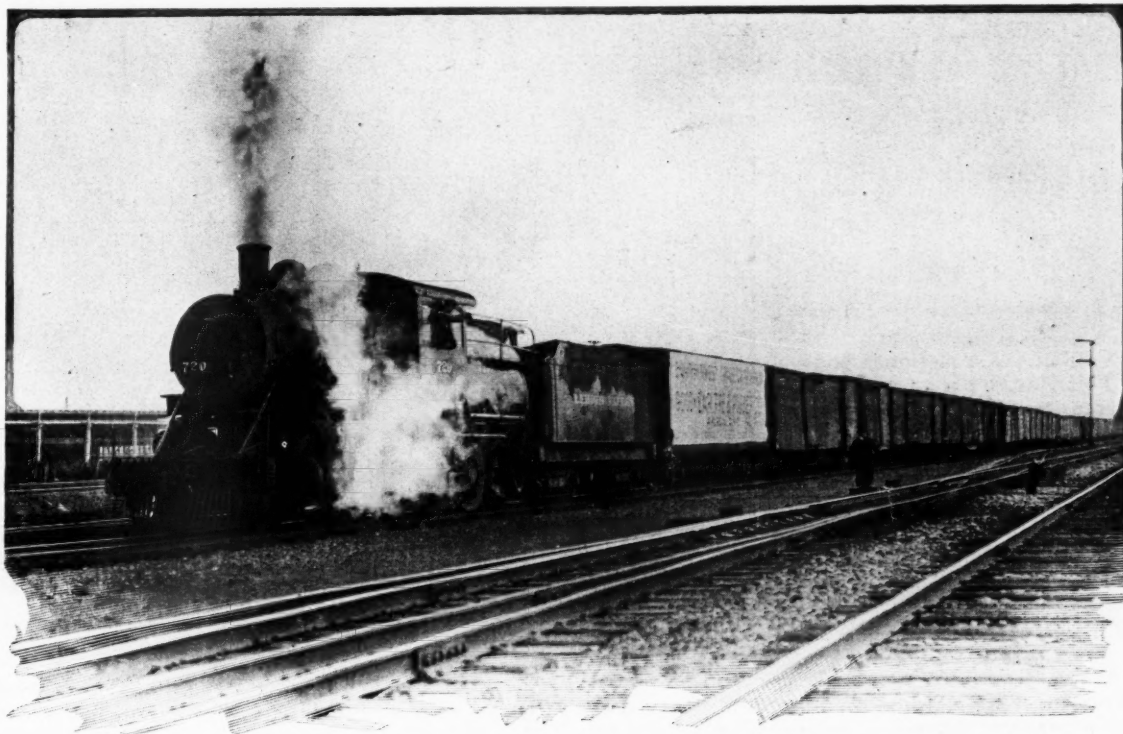
(to the right)

A small part of the \$4,000,000 rubber shipment which motor trucks carried from waterfronts to train.



(to the left)

One of the Williams Shipping Agency's fleet of forty motor trucks which handled the world's largest single shipments.



Fifty-three cars—count 'em—containing 8,435,000 pounds of rubber, representing the largest single shipment sent by one consigner in the country's industrial history. In this distribution chain, extending overseas, through New York and into Ohio, the motor truck was a strong link.

upon a special train consisting of fifty-three cars which started at 11 A. M. on November 28 for Akron, Ohio.

Garford, Drysdale, Packard, Pierce-Arrow, Sterling and United trucks of five and six ton capacity and Mack trucks of eight ton capacity handled this shipment.

Cooperative Display Room for Trailer

A CENTRAL location where American and foreign users of trailers may see these vehicles on display and make purchases has been selected by the Trailer Manufacturers Association. An office and exhibition space covering 5,000 square feet has been taken in the International Tractor, Farm Implement & Trailer Exchange at the Grand Central Palace in New York, and the latest models of trailers represented by the following companies will be permanently on display.

Detroit Trailer Co. and Fruehauf Trailer Co., both of Detroit; King Trailer Co., Ann Arbor, Mich.; Martin Rocking Fifth Wheel Co., Springfield, Mass.; Northway Trailercar Co., East Rochester, N. Y.; Ohio Motor Vehicle Co., Cleveland; and Rogers Brothers Co., Albion, Pa.

National Motor Truck Contest Will Be Held in June

WITH Omaha as starting and finishing point, America's first annual national motor truck reliability contest will be run starting late in June over a middle west course approximately 2,500 miles long through eight states. The route probably will take in the cities of Lin-

coln, Cheyenne, Denver, Colorado Springs, Pueblo, Hutchinson, Topeka, Kansas City, Des Moines, Fort Dodge, Sioux Falls and Sioux City, with an average of 101 miles a day.

The contest will be in competition for a trophy offered by Victor Rosewater, publisher of the *Omaha Bee*. There will be other prizes, and the project is sanctioned by the American Automobile Association. Entrance applications should be filed with F. Ed. Spooner, 420 Book Building, Detroit.

Good Roads Movement in Chile

THE subject of better highways is to be given special attention by the National Congress and agricultural organizations in Chile during 1920, it is officially announced by the Chilean Government.

Pneumatic Tires on New Packard Trucks

PNEUMATIC tired trucks, designed to meet the demand for greater speed and wider range in truck transportation, are announced by the Packard Motor Car Co., for 1920 production. These new models are the first pneumatic tired trucks to be manufactured by the Packard Co.

The trucks are built in three sizes, giving a large range in capacity. Early in November one of these trucks is said to have made a new speed record for motor trucks. It made the run between Bay City, Mich., and Detroit, a distance of 120 miles in 5 hrs. 52 min., an average of 20.6 m.p.h.

The Motor Truck as a Furniture Mover

SPECIALLY designed body having upper compartments enables warehouseman to securely load furnishings of a six-room apartment.

A space is also provided for sleeping berths for the crew—thus allowing the load to be kept moving while on long distance work.



The crew of this \$7,000 furniture moving van can take turns in sleeping inside while goods move from Boston to Washington, D. C.

WARNER & CO., one of the big furniture moving companies of Boston has just had delivered a specially constructed van that will carry on long hauls from Boston, to New York, Philadelphia, Washington, Albany or other cities the contents of a six room flat, including a piano, at one trip. It costs \$7,000 and it is on a 3½-ton White chassis. It has a special body so arranged that there are sleeping berths for the crew in the driver's compartment allowing the load to be kept moving all the time. It is 23 ft. long, with the interior of the body 16 ft., height 10 ft. 6 in., width 8 ft.

The body is the product of the Brown Auto Carriage Company of Cleveland and is constructed without the interior padding familiar to furniture trucks. This is a sanitary measure. Instead of packing the load in mattresses, Warner & Co., who handle nothing but household furnishings, will be able, through the specially designed body, to securely load the furnishings of a six-room house, including a piano, inside the truck, making use of removable boards which divide the body into upper and lower compartments, and tying the load through apertures in the bottom of the body overhang.

As additional insurance against breakage, the load rides on air, as the truck is pneumatically equipped. It is the first time that Boston has seen tires 40x10 in. They are Goodyear cords and are fitted to rear wheels that were cast specially for this truck. The front tires are 38x7 and all four wheels are fitted with Firestone rims. The rear shoes cost, with their tubes, \$360 each and they carry 140 pounds air pressure. The motor is fitted with a double cylinder pump for the tires and a spare tire is carried.

The power plant is of thirty horsepower and the truck is equipped with electric lights. Its gasoline capacity is thirty-two gallons and with full load the mileage is estimated at six to the gallon. In the driver's compartment there is a berth built crosswise over the driver's head and there is another folding berth that can be placed under

this. In addition, if necessary for the entire crew to sleep, the driving seat has folding edge that lifts and converts it into a comfortable bed. Fastened to the chassis at either side are heavy chests that carry all the necessary equipment to overcome road difficulties. The truck costs, ready for the road, \$7,500, and the body interior affords 1,000 cubic feet of cargo space. The driving compartment, which includes the berths, is completely enclosed and is comfortable regardless of weather conditions.

\$2,500,000 Motor Truck Distribution Project

KANSAS, Missouri and Oklahoma consumers will be served by one of the largest motor truck express systems in the country if plans mature successfully as announced by a company which claims a capitalization of \$2,500,000 for financing purposes.

It is stated that orders for 500 trucks have been placed, and that eventually twice that number will be placed in operation. The trucks will be run in trains, and trailers will be used where highway conditions are favorable. More than ninety routes have been selected and it is planned to place the trucks in operation about March 1. These routes radiate from Kansas City, St. Joseph, Atchison, Topeka, Emporia, Independence, Wichita, Hutchinson, Ottawa, Fort Scott, Pittsburg, Salina, Dodge City, Great Bend and Colby. Kansas City leads as the center of radiation of twenty-two routes.

Sinnapaschugy

AN authority on the Indian language declares that the Navajo Indians of Utah call the automobile *sinnapaschugy*. This, literally translated, is supposed to mean "goes with a chunk."



These trucks, operated by the Morrow Transfer & Storage Co., Atlanta, Ga., are engaged in the distribution of merchandise and household goods for distances sometimes of 200 miles.

MORROW TRUCK FLEET MAKES LONG HAULS

THE value of the motor truck for long-haul distribution of merchandise is emphasized once more by the system in operation at the Morrow Transfer and Storage Company's warehouses in Atlanta, Ga. The advertising slogan of the Morrow company is "We haul and store everything," and a fleet of twenty-five motor trucks plays the chief role in this distribution work.

The Morrow trucks make long-haul journeys from Atlanta to Macon, 100 miles away; Augusta and Chattanooga, each 170 miles distant; and for distances of 200 miles when weather conditions are favorable.

The claim that the first warehouses in the south to use motor trucks for distributing merchandise were the storage plants of the Morrow company is made by G. H. Morrow, the president.

"We purchased two 2-cylinder 1½-ton Rapids and one 3-ton Rapids some twelve or thirteen years ago," to quote

Mr. Morrow. "At that time trucks were not perfected and we had a great deal of trouble and finally were forced to abandon them. After about a year we again became interested in trucks and saw that they would eventually be permanent, so we purchased a 1½-ton Selden, chain drive, nine years ago.

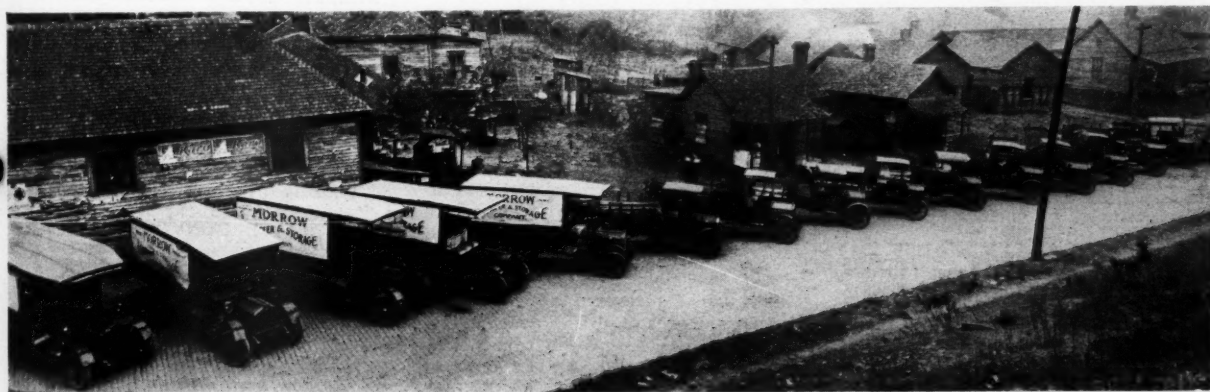
"This truck is operating today, having been built in our garage three times. We use upon it a van body, hauling furniture which weighs 2,500 pounds; and often we have 2,500 to 3,000 pounds of furniture. So you can see that this truck is being overloaded many times. This we do not advise, as we have learned that an overload, even one time, often injures a truck to such an extent as to be very costly, and we have now issued instructions to our foremen and drivers that trucks must never be overloaded at any time.

"We are now operating twenty-five trucks, twenty of these being Seldons of

various capacity—1½ tons, 2 tons and 3½ tons. We believe this truck to be the very best truck on the market for the money and have standardized with them, and in the future we will continue to increase our fleet with the same make. We have had very satisfactory service with this truck; and, having standardized, our mechanics are familiar with it and keep a large amount of parts on hand, which enables us to switch from one truck to another, and we believe we are operating our fleet with minimum expense. We use our trucks for long hauls and for hauling goods for rubber people in the city."

Biggest Cheese Cut

CHICAGO, Dec. 20.—The world's biggest cheese, 8 feet high and 33 feet around, weighing 31,964 pounds and costing \$16,000, is being parceled out to retailers at the Chicago Cold Storage company warehouse.



Here is another view of the Morrow fleet of motor vehicles.

INDIANA WAREHOUSEMEN DISCUSS COST ACCOUNTING

INDIANAPOLIS, Nov. 29—Costs and organization—these were the keynotes of the convention of the Indiana Transfer and Warehousemen's Association in the Indianapolis Chamber of Commerce Building, with representatives from every section of the State present.

Emphasis was placed upon costs, cost accounting, and everything which goes with keeping accurate records, because, without a knowledge of what business—warehousing, transfer, or rural motor express—is costing, it will be impossible to measure the charges which will be necessary to give a right and fair profit, and at the same time to give the public exact and intelligent service.

Emphasis was placed upon organization for the reasons, speakers pointed out, "that man was not supposed to act or to live alone, that success does not come with selfishness, that success comes with the co-operation with every man in similar business and with others whom that line of business serves."

Convinced of the value of organization, the convention laid plans to organize Indiana on a basis similar to that of a political organization. There will be a vice-president in every one of the thirteen congressional districts in Indiana; vice-president will co-operate with the centralized State organization, but will direct his county organization and the city organizations in his district.

The transfer and warehousemen have established the faith in the necessity of their co-operating with the business organizations in the cities and towns—commercial clubs and similar organizations.

A. C. Borgman, of Fort Wayne, was elected president, succeeding J. M. Hedges of Terre Haute. Tom Snyder, of Indianapolis, was re-elected secretary, C. J. Abrams, of Indianapolis, was named treasurer.

All this organization work is considered necessary to take advantage of the great work the motor truck is to do in

Officers of Indiana Transfer & Warehousemen's Association



Tom Snyder,
Indianapolis,
Secretary.

A. C. Borgman,
Fort Wayne,
President.

C. J. Abrams,
Indianapolis,
Treasurer.

Indiana with the coming of good roads built for transportation to enable the motor truck to serve the consumer, producer, manufacturer, wholesaler and retailer.

The railroads, it was pointed out, were avoiding short hauls as something costly, measured by the ease and facility with which the motor truck makes these trips. And with better roads, are coming better streets, for municipalities are seeing that it is cheaper to have good streets than bad streets—cheaper in transportation costs, which the public must pay.

The convention consisted of a business meeting in the afternoon and a dinner in the evening. At the business meeting, B. F. Bartlett, of Huntington, Ind., a rural motor express operator with a fleet of trucks, showed how advantageous it proved to install a cost accounting system. He explained how he stopped many leaks, and how he proved to himself that he was losing money in certain operations when he thought he was making money.

Tom Snyder, of the Highways Transport Department of the Indianapolis Chamber of Commerce, reviewed the work done by the motor truck in the past two years—how it had come to the rescue of the railways during the war, how it had served the cities in the transportation of foodstuffs, how it had served the wholesaler of the city and the retailers of the town, how it stood ready to "hit in the pinch" when the railroad strike was threatened, and how the trucks were organized to transport coal from the mines during the winter. He told of the return loads bureau and how truckmen had evolved good business by working up good transportation business between cities.

W. S. Frye, of Indianapolis, president of the Indianapolis association, told of the "Crime of Cruelty to Trucks"—of how they were destroyed by bad streets and bad roads and by overloading and by having them cared for by the wrong kind of men.

The delegates were welcomed at the dinner by Richard Miller, president of the City Trust Company. The principal speaker of the evening was F. A. Bateman of Chicago, president of the Trans-Continental Freight Company and of the Illinois Furniture Warehousemen's Association. The theme of his address was more efficiency, better costs accounting and better organization, locally and nationally.

Pre-convention Advertising

THE NEW THINGS

you should know about Transfer Overland Hauling and Furniture Warehousing would fill a book, and you would pay a good price for such a book if you could buy it, but you can't.

The next best thing to such a book is the yearly school—the

STATE CONVENTION

of the

INDIANA TRANSFER and WAREHOUSEMEN

at Indianapolis, Saturday, Nov. 29th
All day—Evening Banquet

Meet 200 other fellows who are in the business with you at the

Indianapolis Chamber of Commerce

Arousing Advance Interest

YOUR GOOD MONEY

The new State highways over Indiana.
The State highway truck tax.
The rates for overland hauling.
The organization of real return loads bureaus.
The laws governing highway transportation.
These things directly affect "your good money"

You can not influence one of them "alone," 200 of us can.
We will be there "to do it." Will you join us?

Indianapolis, Saturday, Nov. 29th—All Day
Evening Banquet

INDIANA TRANSFER AND WAREHOUSEMEN'S ASSOCIATION
At Indianapolis Chamber of Commerce

WAREHOUSE CONSTRUCTION

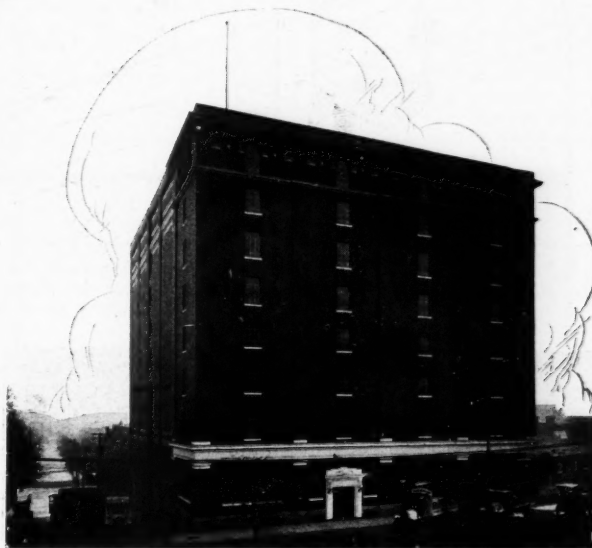
Major Fundamentals Incorporated in \$300,000 Household Goods Plant

WITH the country short of storage facilities, especially those which are adapted for the caring of the household effects of man, warehousemen are giving considerable study to the subject of type of construction from the standpoint of economy. There seems little probability that plans which would be recognized as acceptable ones for a standard warehouse will be developed for many years; meanwhile the warehouseman who contemplates the building of a plant should investigate the many features being incorporated in the newer structures. Such inquiry should enable him to adopt ideas which have proven successful and to learn of the mistakes which others in the industry may have made.

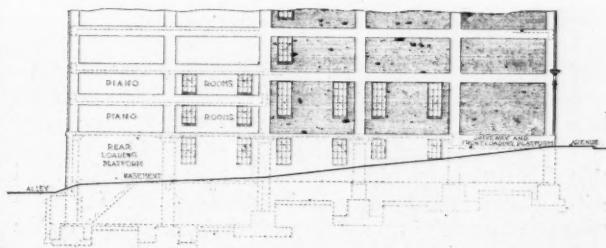
A HOUSEHOLD goods warehouse of a greater height and with a smaller dimension, or one that is nearly square in shape, may be constructed at a lower cost and operated at less expense than one that is of rectangular shape and which covers a large area of ground. This was the major principle upon which were based the plans for the new \$300,000 warehouse of the Shanahan Transfer & Storage Co., of Pittsburgh.

Other fundamentals which serve their relative importance in warehouse construction and which were given much thought in the erection of the Shanahan warehouse—a plant that is considered one of the largest in the country for the storage of household goods—was the size and location of the loading platforms, elevators, the layout of the private rooms, the office and the packing department.

When a warehouseman contemplates the construction of a plant, either he or his architect usually visits a number of newly constructed plants for ideas. After conducting such an investigation the warehouseman or his representative usually concedes that what may be economical for a plant in one section will not be for another. In other words, the warehouseman generally comes to the conclusion that no two warehouses may be constructed of the same designs or plans and still have an economical or perfect layout. Two given sets of plans may be similar in many respects, especially details of minor importance; but the fundamentals which have a major bearing on the warehouse itself must be worked out for each particular plant. There must be taken into consideration, among



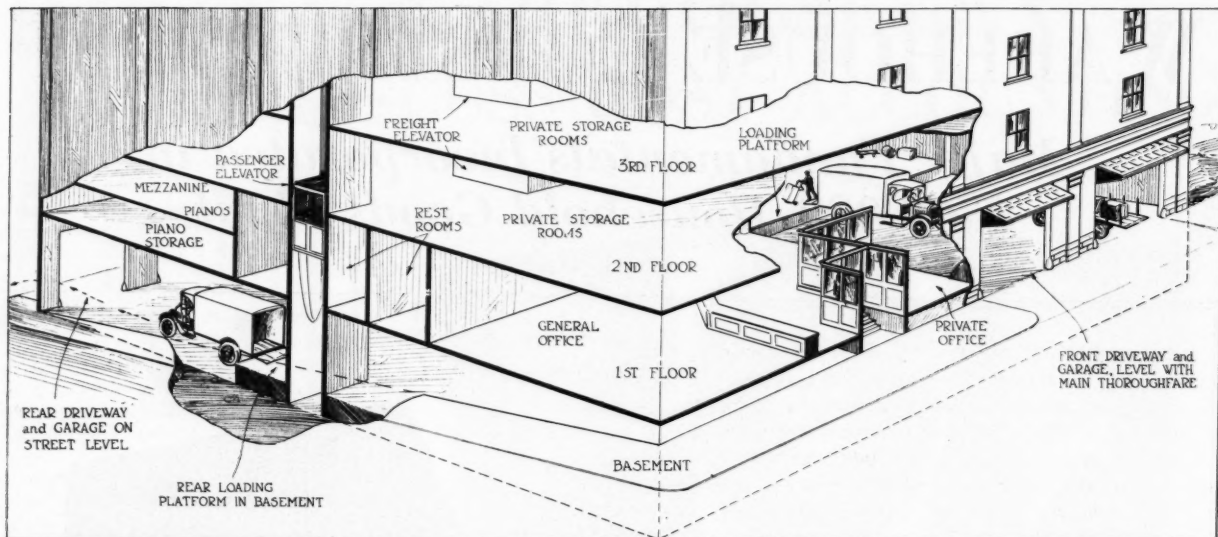
New \$300,000 plant of the Shanahan Transfer & Storage Co., Pittsburgh. It is 100 x 125 ft., constructed of reinforced concrete with a brick facing and flat slab floors. It is equipped with two driveways and loading platforms, one at the front of the plant and the other at the rear.



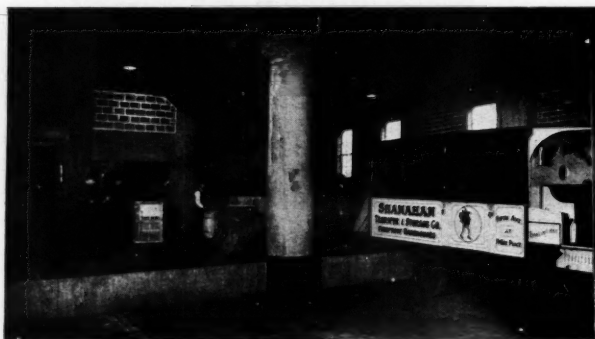
Side view showing how the plant was constructed on a grade of 8 per cent. This grade enabled the Shanahan people to construct two driveways and loading platforms. To eliminate lost space on the first floor a mezzanine floor was constructed directly above the piano, thus giving the company 10,400 sq. ft. of space for piano storage.

other things, location of plant, the area of ground to be utilized, and amount of capital that is to be invested.

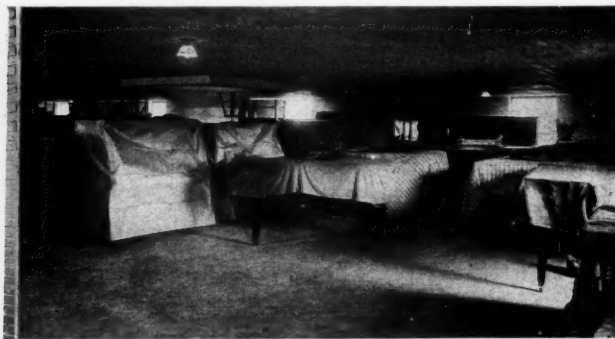
The Shanahan warehouse is 100 ft. by 125 ft. and has a height of eight story and basement and a sub-basement also. It is constructed of reinforced concrete with a brick facing and with a flat slab construction for the floors. All doors and window casings, etc., are also of fireproof construction. While the Shanahan people have acquired the property adjoining the new warehouse, they did not make use of it, due to the extraordinary high cost of the



Prospective showing the general layout of the basement, first, second and third floors of the Shanahan plant. The loading platforms at the front and rear of the plant gives the company over 10,000 sq. ft. of space for loading and unloading. Note the large space given over to the general office.



A section of the front loading platform and driveway showing the elevator entrance at the left.



The piano room, the entrance to which is on the first floor directly along side the elevator.

land, the cost of construction and the additional taxes which such a building would require. Had the warehouse been constructed four-story, 125 ft. by 200 ft., instead of 100 ft. by 125 ft., eight stories high, it would have meant that double the area of space would have to be utilized and still the plant would only contain 100,000 sq. ft. of space—the same capacity as the plant with the smaller dimensions and greater height.

A Mistake Made By Many

Having acquired the property adjoining that upon which the warehouse was constructed, the Shanahan people could have erected a plant 50 ft. by 200 ft., with the 200 ft. facing the main thoroughfare. This would have meant the construction of 500 ft. of walls instead of 450 ft., as is required at present. Besides, a plant of this dimension would have not given a greater floor capacity, nor would it have had two loading platforms on the street level, one at the front and the other at the rear of the building. Thus, it can easily be seen that the nearer the square shape a building is, the less it will cost to construct—that is, figuring the necessary erection of walls.

Still another reason for constructing this plant eight

stories instead of four, five or six, as is the case with many household goods warehouses, was that the Shanahan people, after a careful study of handling goods in and out concluded that household effects could be handled as efficiently and economically in an eight-story plant as in a five or six-story—that is, where provision was made for sufficient loading and unloading space; also the necessary equipment for moving the goods between the various floors. Besides, had the Shanahan people constructed a five or six-story plant they would not have been providing for future growth.

The plant is erected on a slope having a grade of 8 per cent, the entrance, the office and the driveway to the loading platform being at the top, which is on the main thoroughfare. The drawing on page 25 shows a sideview of the general layout. By constructing the plant on this property, it was possible to have two driveways and loading platforms, one at the front and the other at the rear. Both of these driveways and platforms, while they are in different floors, are on a level with a street. At the front driveway, which is on the level with the first floor, there is sufficient space to unload three vehicles under cover at one time. This driveway is also used to house the

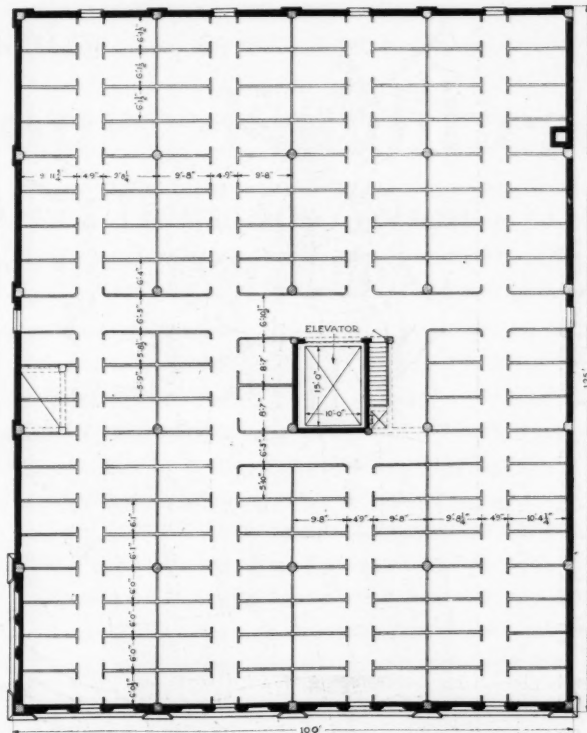
company's trucks at night. Directly at the rear of the driveway is a large platform, in the center of which is a 10 ft. by 14 ft. elevator having a carrying capacity of 5,000 lbs. The first floor is divided between the piano room, which requires a greater amount of space, the office, the silver vault and the driveway, about 4,200 sq. ft. being allotted to the loading platform.

As a ceiling of the first floor has a height of 15 ft. 6 in., a mezzanine floor having a height of 7 ft., was constructed at the rear of the plant for the purpose of housing pianos. The space gives the company 10,000 sq. ft., especially adapted for piano storage.

Driveway Used to House Trucks

The basement, which has an entrance at the rear of the building, is allotted between a driveway, the loading platform the packing department and store rooms for packing materials. The driveway, which takes up the greatest space, is 48 ft. 6 in. by 73 ft. 10 in. This space is large enough for seven vehicles to load and unload at one time without any congestion whatever. The loading platform, which is the same height as the tailboard of a vehicle, is L-shaped and covers 6,000 sq. ft. of floor space. As with the loading platform on the first floor, the elevator is in the center. The driveway at the rear is likewise used at night for the company's trucks.

Each of the two driveways and loading platforms have a special purpose. The driveway and platform at the front of the plant is utilized for goods received and delivered by other warehousemen and van owners, while the rear driveway is used for the goods the company handles to or from its own vehicles. The reason for giving the outside drivers a driveway and loading platform is because they usually take things easy, hoping that some one will assist them in handling the goods. This additional platform eliminates all congestion of holding up the company's own vehicles because after the goods are brought down from the floors above the driver may take as long as he desires for the loading of his own vehicle. It is therefore



Layout of the private rooms on the eighth floor of the Shanahan plant. There are 142 rooms on this floor ranging from 500 ft. to 1,500 ft. in size.

unnecessary for the Shanahan people to turn any of their employees over to this work—that of assisting outside drivers to load and unload. In all, the warehouse has over 10,200 sq. ft. of space allotted to the loading and unloading platform.

The elevator being in the center of the plant, a center aisle having a width of 6 ft. 10 in., extends from one side

(Continued on page 31)



General office and customers' lobby. The appearance of this office is not only pleasing to the eye, but denotes cleanliness throughout the plant.



A view showing one of the cross aisles and also the center aisle leading from the elevator.

Country Lacks Warehouse Facilities

Will Be Unable to Meet Demands When Manufacturers Get Into Production

Analysis of Merchandise Warehouse Industry

The Warehouse Industry is Now Being Recognized as an Essential.

Distribution and Pool Car Activities Increase as High as 60 Per Cent in Some Sections.

Reports from Warehouses in Thirty-six Cities in Eighteen States Show 87.1 Per Cent of Merchandise Space Occupied.

Many Warehousemen Plan to Construct New Plants Within Near Future.

THAT the merchandise warehouse industry is receiving greater recognition by the manufacturer, the national distributor, the wholesaler and the jobber is indicated by the general increase in warehouse activities and the percentage of warehouse facilities occupied during November and December. Inquiry shows that there are few sections where the warehouse facilities are sufficient to meet the demands. As a result many warehousemen have plans already drawn for new plants, while others are contemplating construction.

Reports from warehousemen in thirty-six cities in eighteen states indicate that the estimated warehouse space of the country was 81.1 per cent occupied during November and 87.1 per cent in December. Comparing these figures with the estimate space occupied during October, they show an increase of 2.1 per cent in November and 8.1 per cent in December.

That merchandise distribution through warehouses is increasing daily is shown by the response received from warehousemen in sixteen cities. These reports show an increase in this activity from 5 per cent to 60 per cent—that is, comparing the November and December business with that of October. This increase has come to the warehouseman notwithstanding that the distributor and the jobber and the retailer have been unable to get their orders filled, due to retarded production brought about by labor unrest, a condition which has affected the warehouse business equally with the other industrial interests of the country.

Look for Business Increase

With the coming of the new year many of those connected with big business look for a change for the better, particularly in regard to general market conditions, through greater production as labor unrest is relieved. The result of such a change should mean increased business for the merchandise warehouse, particularly through distribution and pool car shipments.

As the situation stands to-day in regard to the purchasing of large stocks by distributors, jobbers and wholesalers, the greater percentage of these men appears to be waiting for a more steady market. During the past two months many of the larger distributors, jobbers and wholesalers have been so far behind in their deliveries that they have had goods shipped by express direct from the factories instead of at the lower transportation rate. In many instances these or-

ders, particularly the larger ones, were sent direct from factory to ultimate consumer without passing through the hands of distributor, jobber or wholesaler—that is, with the exception of the billing, etc.

There are four major problems which have a bearing on the warehousing conditions at this time, according to reports received from warehousemen in thirty-six cities in eighteen states. These problems in their relative importance are labor unrest, railroading, shortage of warehouse facilities, and adjustment of rates.

While labor continues to offer the major problem confronting the warehousemen in twenty-three cities there has been a material change for the better in many sections. The following cities were still affected by labor unrest during November and December:

West: Long Beach, Los Angeles, Oakland, Sacramento, Tacoma, Seattle, Billings, Lincoln, Neb., Denver.

Central West: Kansas City, Des Moines, Fort Dodge, Columbus, Cleveland, Canton, Chicago, Little Rock.

Southwest: El Paso, San Antonio, Waco, Fort Worth, Phoenix, New Orleans.

East: Boston, Fall River, New Bedford, Bridgeport, New Haven, Philadelphia, Baltimore, New York.

Car shortage is a problem affecting the activities of not only the merchandise warehouse industry but the cold storage and household goods warehousemen. Indeed the situation is such that it is disturbing to virtually every large shipper in the country. The cities where the merchandise warehouseman is being confronted with car shortage, terminal congestion and other railroad problems follow:

West: Oakland, Los Angeles, Aberdeen, Denver, Oklahoma City.

Central West: Chicago, Indianapolis, Fort Dodge.

Southwest: Beaumont, Texas.

East: Elmira, New York City.

Shortage of Warehouse Space

November and December reports show a greater shortage of warehouse space than during any previous time within the past year. In this connection it is learned that a number of warehousemen have plans drawn while others are contemplating the construction of new plants to handle the increase that is expected when the market condition becomes more

settled. The cities where there is a shortage of space are:

West: Long Beach, Sacramento, Denver.

Central West: Little Rock, Chicago.

Southwest: Phoenix.

South: Louisville.

East: Bridgeport, Pittsburgh, Lebanon, Pa.

Adjusting rates to conform with prevailing conditions in regard to labor and other operating costs—so that a fair profit may be derived on investment, is a subject of vital importance to the warehouseman in every section of the country. Warehousemen say that few manufacturers, distributors, jobbers or wholesalers have realized the limited extent to which the warehousemen's operating expenses have increased as compared with increases in other lines of business. As a result the warehousemen claim that they are underpaid, especially those who have no statistics as to what it costs them to handle certain classes of goods. In some cases the warehouseman reports that even though he has an excellent cost accounting system, and is able to produce figures as to what it cost to do certain classes of work, many customers believe his rates are unreasonable. The principal cities where this condition is most noticeable, according to reports, are Seattle, Des Moines, Oakland, Sacramento and Fort Worth.

Unintelligent competition is said still to prevail at Baltimore, due to some of the warehouses having a large amount of vacant space and computing a low rate on virtually all commodities—both storage and handling—without having any conception of overhead. Accordingly distributors, jobbers and wholesalers who store goods are quoted varying rates computed on different bases by the Baltimore warehousemen. This has a tendency to make it difficult for the warehouseman who knows his operating to attract business. Men who have made a study of warehouse operation are convinced that such a situation cannot continue permanently, because the man who is selling service below what his costs are will sooner or later go into bankruptcy.

Canned Goods Receiving Large Movement

Canned goods, general groceries supplies, house furnishings and candies were handled in large quantities in the West during November and December. Other commodities which were handled in the West on a large scale were canned fish at Long Beach; hops for export at Oakland; lumber at Tacoma; chocolate coatings at Seattle; paper and woolen goods and fruits at Salem, Ore.; dry goods and shoes at Portland; nuts and imported herring at Lincoln, Neb.

In the Central west canned goods and cereals received the largest movement during the past two months. Stoves, paper dry goods and phonographs were handled in large quantities at Kansas City; flour, cereals and lard substitutes at Davenport, Iowa; winter automobile tops, canned goods, denatured alcohol, phonographs and tinware at Des Moines; coffee at Chicago.

Furniture was handled in large quantities in the Southwest in November and December. At Fort Worth, dry goods and canned goods were the necessities that received a greater part of the movement; general foodstuffs, hardware and cotton were moved in large volume at Beaumont and Phoenix.

In the South, machinery, soap, and general foodstuffs received the largest movement.

Flour, canned goods and general foodstuffs are the products handled in the largest quantities in the East. Other commodities that were moved in great volume through that territory are wood pulp, cotton waste and cotton goods, fruits, farm implements and fertilizer materials.

In November the warehouse space occupied, according to estimates received from warehousemen in thirty-six cities, was 81.1 per cent, this figure being divided as follows: West, 87.2 per cent; Central West, 84 per cent; South West, 72.1 per cent, and in the East 85.1 per cent. During December, 87.1

per cent of the merchandise warehouse space was occupied, divided as follows: West, 94.5 per cent; Central West, 86.2 per cent; South West, 84.5 per cent; South, 92.5 per cent, and East, 78.1 per cent.

The following table is the estimated percentage of warehouse space occupied at various cities during October, November and December.

	Dec.	Nov.	Oct.
Alhambra, Cal. ....	.....	.....	75
Boise, Idaho .....	.....	.....	75
Aberdeen, Wash.	95	.....	.....
Lincoln, Neb.	93	90	.....
Long Beach, Cal.	85	.....	.....
Los Angeles .....	.....	93	.....
Billings, Mont. ....	.....	90	.....
Denver	80	80	80
Oakland, Cal.	90	95	95
Omaha .....	.....	.....	75
Oklahoma City	100	.....	.....
Portland, Ore. ....	.....	75	60
Salem, Ore. ....	.....	90	.....
Salt Lake City	95	.....	85
Seattle .....	.....	70	.....
Sacramento .....	.....	100	.....
San Francisco .....	.....	83	83
CENTRAL WEST—			
Canton, Ohio	80	.....	90
Cedar Rapids, Iowa ..	85	.....	.....
Chicago	80	80	.....
Cleveland .....	.....	75	75
Columbus .....	.....	88	75
Indianapolis	95	.....	80
Davenport, Iowa .....	.....	80	100
Des Moines .....	.....	80	.....
Fort Dodge, Iowa	90	80	.....
Kansas City, Mo.	85	85	85
Little Rock	90	.....	.....
Mansfield, Ohio .....	.....	.....	100
Minnesota Transfer, Minn.	90	.....	78
Zanesville, Ohio	80	.....	75
SOUTHWEST—			
San Antonio	62.5	95	90
El Paso	75	75	85
Fort Worth	95	80	80
Phoenix, Ariz.	95	93	.....
New Orleans .....	.....	40	60
Waco .....	.....	50	.....
Beaumont, Texas	95	.....	.....
SOUTH—			
Birmingham .....	.....	.....	90
Columbus, Ga.	90	.....	.....
Louisville	95	.....	.....
Richmond .....	.....	.....	65
EAST—			
Baltimore	78.6	83.6	77.7
Boston	90	88	88
Bridgeport .....	.....	95	95
Fall River	65	50	.....
Elmira	100	.....	.....
Lebanon, Pa.	95	95	90
New Haven .....	.....	100	.....
New Bedford	60	.....	.....
New York	82	80	76.5
Philadelphia .....	.....	70	90
Pittsburgh .....	.....	95	.....
Scranton, Pa.	70	.....	70

CANADA—The majority of merchandise warehouses have an enormous amount of vacant space on their hands and are doing their utmost to obtain additional business. According to reports received by DISTRIBUTION & WAREHOUSING, Montreal is the only section where there is anything like a shortage of warehouse facilities.

The labor situation in Canada was better than it had been for some months, although reports indicate that wages were still exceedingly high. The situation in Canada is similar to that of the United States in regard to large stocks being purchased by the distributor, jobber and wholesaler. There are few sections where large stocks may be obtainable. Even under these circumstances, however, the distribution activities of one of the largest warehouse companies in Toronto have increased during the past month.

THE REVOLVATOR

A Warehouse Labor Saving Device

HERE are a number of "mechanical loaders" or piling and tiering machines on the market which are efficient time and labor saving contrivances for warehouse and freight car loading and unloading. The general construction of these machines—or portable elevators, as they are sometimes called—is similar, consisting of two uprights and an elevating platform. One type has a revolving base which can swing on its own center like a turntable; this machine, because of this exclusive feature, is known as the revoluator.

Bales, barrels and boxes may be placed upon the revoluator's platform and, without altering the position of the machine itself, may be swung around by means of the revolving base until it faces the pile and then may be raised to the desired height, where the goods may be shoved off onto the top of the pile. In most instances this machine may be operated by one man, and it is equally adaptable to detiering or unloading the pile.

The revoluator is manufactured in two types, one motor driven and the other equipped with a hand crank. Rollers on the platform permit of the load being easily slid from the revoluator directly into the space into which the goods are to be stored. The heavy work of lifting articles is transformed into the simple turning of a crank operating the gear-shift mechanism. For handling soft goods such as bales and bags and sacks a removable wood top may be placed on the revolving base. By changing the ratio of gear any desired capacity of a revoluator can be made ranging from 400 pounds up to 2,000

WAREHOUSEMEN, manufacturers and forwarders in too many instances rely on the man-power method of loading and unloading freight cars. This not only consumes a great deal of time and means the employment of labor uselessly, but more often does not permit the full use of car capacity in loading. Reduction of labor and speedy loading and unloading may be accomplished by mechanical means. The revoluator is one device which serves this purpose in freight cars and depots, and its usefulness in warehouses is obvious.

pounds or more. Some of the advantages of this machine are this:

It increases the storage capacity of warehouses and stock rooms 20 to 50 per cent. This is because it stacks cases, bales, boxes, barrels, etc., clear up to the ceiling, leaving no waste space, and because it renders wide aisles unnecessary.

It reduces the labor bill for handling material. Working with a revoluator, two men may often store as much material as five or ten men working by hand.

It makes it possible for heavy and bulky packages to be stowed compactly. And one man can operate the revoluator.

It removes individual packages from any place in the warehouse. The simple method is followed of swinging the revoluator to the desired package and lowering it.

It minimizes danger of breakage. It is not necessary for the packages to be passed from man to man, or bumped from one stage to another.

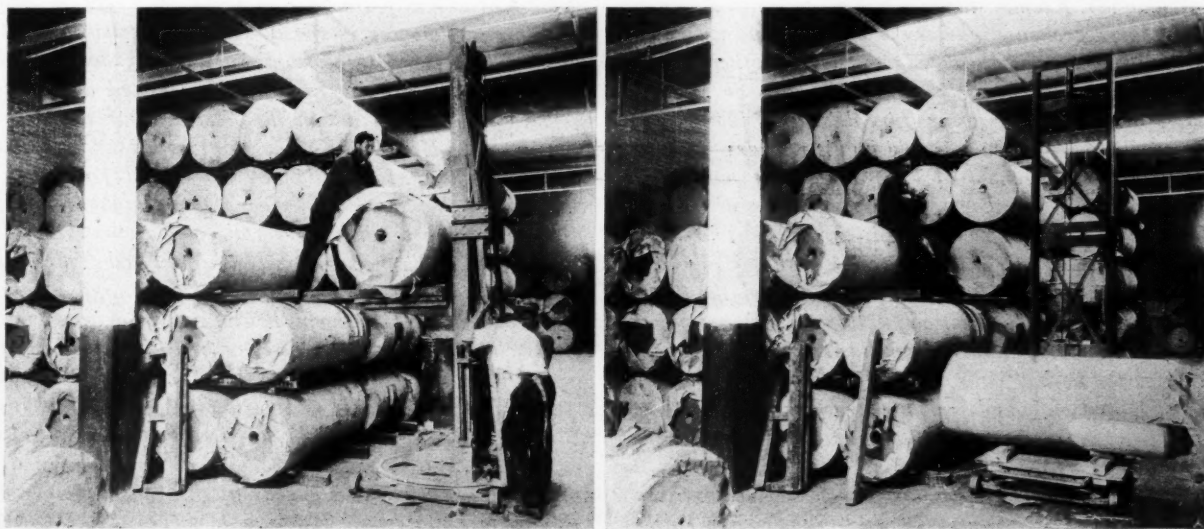
It enables goods to be loaded or unloaded at any side. The revolving base makes this possible—and the revolving base is considered the most important feature of a successful tiering machine.

It can tier at the end of a narrow aisle. The revoluator does not have to be moved in and out of the aisles for the distribution and detiering of heavy loads.

It can be moved from room to room through low doorways, or placed on elevators and removed from floor to floor. This is so because the revoluator's uprights are jointed, allowing the upper half to fold over.

It does not endanger the operator. There is no possibility of the crank handle flying backward and striking the laborer, as the shaft must be removed from the elevating shaft and placed on the lowering shaft in order to open the brake jaws to allow the platform to descend. The load is sustained independently of the crank, as a ratchet is provided which sustains the load at every point. The ratchet and pawl are always in action and cannot be operated by the crank or interfered with in any manner.

It is held rigid so that it will not change its position in reference to the floor. For this purpose a floor-lock is used.



Showing how the revoluator operates—rolls of paper being removed during a detiering process at a New York Printing establishment—the revoluator is adaptable to all work of this character in warehouses and freight cars.

It cannot upset. Anything which is not too large to balance on the platform can be handled with perfect safety. For unusually bulky loads there can be used a base of sufficient size to keep the center of gravity of the load always within the area of the base.

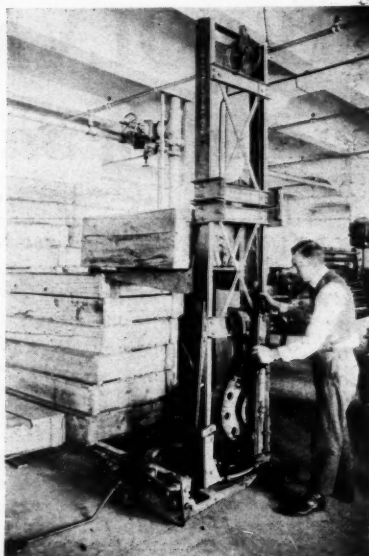
Goods may be removed backwards or sideways from the machine if desired. This is so because the platform is provided with four removable and interchangeable rollers. These rollers are normally parallel to the back of the machine but they can be quickly turned parallel to the sides of the machine.

The electric-driven revolvator may be equipped with any standard type of motor for operating on any commercial circuit.

Summarizing all these advantages in six words: "The revolving base is the secret."

Plans Big Warehouse

BOSTON, Dec. 5—Boston is to be the site of a \$2,500,000 warehouse development, according to the plans of the terminal company, of which Jonathan Starr is chairman of the board of directors. The plant is to be in South Boston ad-



Revolvator at work in another New York printing establishment.

joining the railroad yards of the N. Y. N. H. & H. railroad. Plans thus far divulged call for a four-story concrete building with 750,000 sq. ft. of floor space, with a double track for freight trains running through the center of the structure. The two upper floors will be subdivided and leased to tenants and the two lower floors for less than carload lots and general merchandise. The railroad commission will pass upon operating conditions.

Has a Truck Nine Lives?

A MOTOR truck should never wear out, and would not if worn parts were replaced in time and the truck was handled only by skilled and careful drivers. The Indianapolis Chamber of Commerce's publication, "Heart o' Trade" in support of this statement cites several cases in its current issue where Indianapolis truck owners have operated trucks for four and five years at a cost of less than \$100 for parts, and the trucks are performing as well as when they first went out.

WHO IS JAMES H. KEENAN?

Once he was a coroner's office boy; today—read this sketch of the life of the new President of the American Warehousemen's Association.

JAMES H. KEENAN, newly-elected president of the American Warehousemen's Association, began his business career as a twelve-year-old office boy in the office of a county coroner; one of his earliest storage plants was located over a stable.

Today Mr. Keenan stands a leading figure in America's expanding warehouse industry and is identified with banking, industrial, agricultural, educational and other interests in the city where he was born—Pittsburgh—on March 4, 1861, which was Abraham Lincoln's first Inauguration Day. Of Mr. Keenan it is said by his friends: "He was educated in the school of experience. He has not yet been graduated and therefore he is without a diploma."

After Mr. Keenan abandoned, about 1873, his job as coroner's office boy he held clerical positions in various political offices until 1884, when he entered the employ of the Pennsylvania Railroad Company's Duquesne station as a receiving clerk. From this service he resigned in 1889, when he had risen to the office handling of the station's in and outbound freight operations.

Retirement from freight directing was for the purpose of borrowing \$1,000 to enter business. Financed by this amount, the partnership of the Haugh & Keenan Storage & Transfer Company was formed. Repairing, refinishing and re-upholstering furniture now engaged Mr. Keenan's attention—on the third floor of an old building, the furni-

ture being hoisted and lowered from and to the front sidewalk by means of what Mr. Keenan calls "an Armstrong elevator," but which is generally known as a rope. Storage of household goods was added in a small way, these being handled with the same "elevator"—and that was James H. Keenan's start as a warehouseman.

It was not long after this that the premises above a stable were obtained by Haugh & Keenan, and these were abandoned a few years later in favor of a real building for storage purposes in the downtown district of Pittsburgh. This warehouse was disposed of to the Pennsylvania Railroad in 1902, and the firm erected a building with railroad connection in the East End or residential section. The Haugh & Keenan plant stands today on that site and includes two additional up-to-date fireproof structures. In all there are 2,000,000 cu. ft. of warehouse space.

Besides being president and a director of the A. W. A., Mr. Keenan holds the same offices in the Pittsburgh furniture Storage & Movers' Association, Pittsburgh Factory Site Co., Pied Piper Chemical Co., and in his own firm. He is vice-president and a director of the East End Savings & Trust Co.; Pittsburgh Hospital and Pittsburgh Athletic Club; treasurer and a director of the Pittsburgh Industrial Development Co.; a director of the Commonwealth Trust Co., and the Schenley Farms Co.; and a member of the advisory boards of the Curtis Home and Duquesne University. He is a member of the Chamber of Commerce, the Board of Trade and the Duquesne Club of Pittsburgh.

FROM THE LEGAL VIEWPOINT

By George S. Kaiser

George F. Kaiser is a practicing lawyer who makes a special study of warehousing and transfer affairs. Service given in these pages is free. DISTRIBUTION & WAREHOUSING cannot agree to answer all questions, but will do so far as is possible.

Paying Additional Charges on a Bill Already Paid

Editor, DISTRIBUTION & WAREHOUSING: I notice in your October issue of "Transfer & Storage," page 36, a decision rendered by Mr. George F. Kaiser, in reference to the paying of corrected railroad bills when presented.

Mr. Kaiser states that he does not blame customers one bit for refusing to pay the additional charge on a bill which has already been paid and in a matter which has already been settled. He thinks that the company has no right to expect payment of the additional charge under such contingency.

As a matter of information, I write to ask if I could be furnished with the authority for such decision, as I am under the impression that a common carrier must collect its charges in accordance with tariffs on file with the Interstate Commerce Commission, and if after bill had been rendered, it is discovered that the incorrect rate was charged, it becomes incumbent upon the carrier to take the necessary steps for collection of the correct legal charge.

Under the rules of the Interstate Commerce Commission, I think you will find that the carrier has no other recourse in the matter.

As an interested person, I crave an early reply. C. & Co., N. Y. City.

ANSWER:—As I understand it the Interstate Commerce Act undertakes to regulate the question of charges by prohibiting as unlawful every unjust and unreasonable charge, also all rebates and unequal charges to different persons for like and similar services, under substantially the same circumstances, and all undue and unreasonable preferences or advantages.

In the case which you refer to, about six bills had been sent in involving a total amount of \$4.50. The common carrier can demand payment even though the mistake in the charge may not amount to an unreasonable preference, but if the customer refuses to pay I do not believe the carrier is expected to institute six separate law suits for a total of \$4.50. At the very time the carrier is demanding payment of amounts like this, I think I can safely say, that it is not really expecting that they will be paid. In a case like the one under discussion, the under charge is a mistake, and certainly not an attempt to discriminate.

you say common carriers in general are boatmen, owners of stage coaches, omnibuses, hacks, drays and express wagons, railway, express, street car, and steam boat companies, so I think my employer should come under this heading.—T. J. R., Orange, N. J.

ANSWER: If your employer is engaged in the business of transporting goods between Newark and New York regularly for hire, he will be classed as a common carrier.

Even if he were not a common carrier he would be liable for the reasonable value of the goods if they were lost through your negligence, and I am not sure that it would not be held to be negligent to send a cargo of valuable goods out in charge of a single man. As a common carrier your employer can only relieve himself from liability by special contract as he is responsible for all losses except those arising from the act of God, the public enemy, the inherent nature of the goods themselves or some act of the shipper or public authority.

Unfortunately, DISTRIBUTION & WAREHOUSING cannot give advice in a case like this, but must refer you to your own counsel. The object of this page is simply to give reports of recent cases, distribute legal information, and print legal articles of an educational value. Your employer should retain personal counsel at once.

Is Liable for Reasonal Amount

Editor, DISTRIBUTION & WAREHOUSING:—I read your legal page every month and am taking the liberty to ask your advice in the following matter.

Our foreman sent a man to a factory to receive five cases of goods to be carried to New York. The man received the case and signed for them on a blank paper. After the driver left the factory the shipping clerk put down the value of the goods as \$3,500.

Our regular receipt calls for a value of \$50—100 lbs. unless value is given. The next day the cases were placed on my truck for delivery. I backed up in front of the building at the place where they were to be delivered and as it was the first time we had made a delivery to this firm, I went in the building to see where the case should be placed. I asked the elevator man and he brought me up to the second floor. I then asked the receiving

clerk and upon receiving instructions from him, told him the charge. He called his employer, who objected to the price. Upon looking out of the window to see the size of the case, we discovered the car was gone. The police found it two hours later about four miles away, but the case had been removed from it. Now I would like to know this, is my employer responsible for \$3,500 or is he a common carrier and responsible for \$50 on 100 lbs. The firm which was to receive the goods say that they were stolen because of my carelessness in leaving the truck, but I could not do otherwise as I could not find out where they would be received without leaving the truck. If you will mail me your opinion it will relieve my mind as the firm has put the case in the hands of a lawyer for the full amount.

I read your article in the November issue on special contracts and note that

Difference of Judicial Opinion

THE question as to whether or not the acceptance of a receptacle, such as a box, chest, package, or envelope, charges a warehouseman as a bailee of the contents is one in which there is a good deal of difference of judicial opinion.

The point has been passed on in very few cases and therefore it is difficult to determine just what the rule is upon the point.

It was held in *Sawyer vs. Old Lowell National Bank*, 230 Mass. 342, 119 N. E. 825, that a bank accepting from a customer a box for safekeeping, without knowledge of its contents, is not liable in damages for failure to produce and deliver a will contained in the box, upon decease of the customer. On the other hand, as shown in the note accompanying the preceding case in 1 A. L. R. 269, several courts have seemingly regarded one who accepts a receptacle for safe-keeping as a bailee of the contents, even though he had no knowledge of such contents.

CINCINNATI CONVENTIONS

DISCUSSES PROBLEMS OF INTEREST TO INDUSTRY

(Continued from page 17)

MR. LOVEJOY in his report as president at the opening of the convention said the members could look back with pride across the past year—a year which was, he declared, one “without parallel not only in the volume of business but also in the great benefits which have been derived directly and indirectly throughout the country from the work done by our committee on standardization of basis for rates.” Demand for storage facilities had kept up steadily, he said, but now seemed to be returning to normal.

After explaining what the committee on standardization of basis for rates had accomplished—chiefly the work leading to the establishing of the Pittsburgh bureau—Mr. Lovejoy continued:

“Now that this central bureau has been formed it seems to me that it is imperative that we turn attention to, and take action regarding the future of this bureau. It should be given your consideration and plans made with proper committees formed to conduct this central bureau so that the different sub-divisions will have proper access and proper facilities for conducting the problems that may come up in their respective sub-divisions. I wish to call to the particular attention of the members, for their consideration, that the extra work involved has taken a great deal of our secretary's time. I think he is not properly recompensed for the service he is rendering our association, and I am speaking for him now on account of his modesty in this respect.”

Mr. Lovejoy called attention to the fact that Congress in enacting legislation for the taking of the fourteenth census omitted a provision for covering the warehouse industry, and said the A. W. A. committee on laws and legislation had taken the situation up at Washington.

Urges Warehouse Census

“The committee will no doubt require the co-operation of some of our members with members of Congress to see if it is not possible to get an amendment made so as to have it taken up in this census,” said Mr. Lovejoy. “This matter should be discussed in the convention so that the committee on laws and legislation can take some further action, as it would be very valuable to know the number of warehouses, the character of warehouses and the capital invested in such warehouses. If we can accomplish this much from the Director of the Census so that he would compile that information it might be of

great help until the next census, when the whole matter could be gone into. There is no question in my mind but that this inquiry should emanate from the American Warehousemen's Association as the recognized leading unit of the warehousing industry. If the warehouse industry does not do so the demand for such an inquiry is not likely to originate elsewhere.”

Discussing the Pittsburgh bureau, Mr. Lovejoy said: “Your president is still of the same mind in regard to the forming of local associations with the idea of taking up handling and storage costs in different localities, so that the information may be turned into the central bureau, where we would all have some place from which to obtain information required for the proper conducting of our business.

Welcome to Traffic Men

“The details cannot be worked out by the central bureau. It has got to be done by the individuals in different localities, they sending some to the central bureau for the benefit of warehousemen throughout the country. This means, of course, co-operation, and if the members will co-operate with their figures there is no question but what the result will be amazing. This not only applies to general merchandise but applies to cold storage and household goods as well.

“It seems an opportune time for united action, for the problems which confront us must be solved in a way that will be beneficial to everybody. To solve these problems requires teamwork and confidence in each other, which has in a large measure caused the success of the Massachusetts Storage Warehousemen's Association, of which I have the honor of being president.”

Alluding to the presence of the traffic managers, Mr. Lovejoy said:

“Through co-operation with the paper called *DISTRIBUTION & WAREHOUSING* (formerly “Traffic & Storage”) your president extended an invitation to the traffic managers throughout the country, who distribute and store merchandise, to meet with us and take up the problems of handling charges. There has been some dissatisfaction in the past with a great many traffic men in getting various rates and charges for distribution of their merchandise. They have demanded that certain things be done and some warehousemen have resented their requests and others thought the requests perfectly proper. This naturally has caused dissatisfaction which could not be

CINCINNATI CONVENTIONS

THE necessity of universal adoption of the Massachusetts system of warehouse cost account storage and handling has been recognized by all three sub-divisions of the American Warehousemen's Association, and each sub-division will be represented in the activities of the Pittsburgh central bureau from which the propaganda will be directed. The Central Bureau committees chosen at Cincinnati are:

GENERAL

John L. Nichols, chairman, Boston.
W. Lee Cotter, vice-chairman, Mansfield, Ohio.
W. B. Mason, Cold Stge., Providence.
S. M. Woodson, gen'l mdse., Kansas City.
C. A. Aspinwall, H. H. goods, Washington, D. C.

MERCHANDISE SUB-DIVISION

T. E. Witters, chairman, Baltimore.
John Bekins, vice-chairman, Omaha.
C. W. MacDonald, Chicago.
Edwin Morton, New York.
S. G. Spear, Boston.
Geo. Hamley, Minneapolis.
S. H. Verrall, Chicago.
D. L. Tilley, New York.
E. H. Bacon, Louisville.
R. W. Dietrich, New Orleans.

COLD STORAGE SUB-DIVISION

W. B. Mason, chairman, Providence.
O. C. Mackay, Boston.
Geo. H. Stoddard, Boston.
F. M. Shoemaker, Elmira, N. Y.
F. A. Horne, New York.
Nimmo Old, Norfolk.
A. V. Mason, Pittsburgh.
George Kettridge, Columbus.
M. C. Cummings, Chicago.
R. H. Switzer, St. Louis.

HOUSEHOLD GOODS SUB-DIVISION

Not yet organized. May be represented by its executive committee.

THESE are the men who will direct the affairs of The American Warehousemen's Association during 1920:

OFFICERS (General)

President, James F. Keenan, Pittsburgh.
Vice-President, George S. Lovejoy, Boston.
Treasurer, Walter C. Reid, New York.
Secretary, Charles S. Criss, Pittsburgh.

BOARD OF DIRECTORS

Gardner Poole, Boston.
M. C. Cummings, Chicago.
Homer McDaniel, Cleveland.
W. Lee Cotter, Mansfield, Ohio.
F. L. Bateman, Chicago.
C. A. Aspinwall, Washington, D. C.
D. H. Van Name, New York.
R. L. Spencer, Pittsburgh.
W. W. Morse, Minneapolis.

MERCHANDISE SUB-DIVISION

Executive Committee

D. H. Van Name, chairman, New York.
T. E. Witters, vice-chairman, Baltimore.
R. L. Spencer, Pittsburgh.
W. W. Morse, Minneapolis.
S. M. Haslett, San Francisco.
Wm. E. Halm, New York.
C. L. Criss, Pittsburgh, secretary.

HOUSEHOLD GOODS SUB-DIVISION

Executive Committee

Walter C. Reid, New York.
W. Lee Cotter, Mansfield, Ohio.
James F. Keenan, Pittsburgh.
C. A. Aspinwall, Washington, D. C.
F. L. Bateman, Chicago.
T. Y. Leonard, Detroit.

COLD STORAGE SUB-DIVISION

Executive Committee

Eugene W. Lewis, chairman, New York.
Gardner Poole, Boston.
M. C. Cummings, Chicago.
Homer McDaniel, Cleveland.
A. V. Mason, Pittsburgh.

explained by either side, and after consultation we thought the only thing to do was to get together and thrash these matters out in our convention, where traffic men from different sections of the country can meet the warehousemen face to face and, no doubt, solve a great many of the problem. While they have perhaps called us 'robbers' in some cases, we have called them 'most unreasonable,' and by getting together we will probably both see the error of our ways.

The Furniture Men's Association

"We have had notice from about thirty-five or forty gentlemen signifying their intention of being present, and trust our members will extend every courtesy, giving them full information on any subject they may require. While we can perhaps accomplish something this year, I think it will lead in the future to the traffic men forming an organization of their own for the purpose of consulting with our association on matters of common interest."

Mr. Lovejoy spoke of the increased membership in the A. W. A. and gave credit to Mr. Keenan in this connection. The president then took up the question of the furniture members organizing a national association. He said:

"Your president received through our secretary a communication from Mr. R. J. Wood, secretary of the Illinois Furniture Warehousemen's Association, stating that at their last annual meeting a resolution was passed relative to the formation of a national household goods warehousemen's association, and he was instructed to ascertain from the various associations whether they were agreeable to the formation of such an association, and requested that a committee of not more than three be appointed from each organization to meet and discuss the matter and formulate plans. This letter was dated November 7, and at that time we were informed that a committee had been appointed from the New York, Illinois, Pacific, Southern New Jersey, Pennsylvania and Baltimore associations, and

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then went on to say that it had been suggested that a conference of this committee be held at a point to be suggested just prior to the meeting of the American Warehousemen's Association; also that the American Warehousemen's Association should, of course, be represented at this conference, and asked our secretary to take up the matter and ascertain if it was the desire of our association to appoint a committee to confer with them.

This matter was taken up with the directors and, while there was a varied opinion, we thought it no more than right that a committee be appointed and report back at this convention. Your president appointed Mr. W. Lee Cotter, Mr. C. A. Aspinwall and Mr. S. C. Blackburn. Mr. Blackburn accepted the appointment but had to decline on account of conditions existing in his city—coal and labor troubles; therefore, Mr. M. R. Matthews was appointed in his place. This conference was to be held on December 5 at White Sulphur Springs, W. Va."

Secretary's Report

Charles L. Criss, in his report as general secretary, said the warehouse industry had continued to be taxed to its capacity during the past year and had maintained its place with other industries during the reconstruction period.

Mr. Criss spoke of the war affecting the nation's home life, this giving to furniture warehousemen an unusual amount of business, which was increased also by building trades conditions. "It appears to be recognized," he added, "that the condition is not likely to be a permanent one and that any easing up in the cost of construction would have the effect in a few months of causing heavy withdrawals of such goods now in storage."

Volume of merchandise handled through the warehouses during the past year average heavy. "With improved transportation service," he said, distribution is being effected today on a much more satisfactory basis than one year ago, and it is reported from some sections, notably the Pacific Coast, that the improved transportation service has had the effect of causing heavy withdrawals of goods from warehouses. A recent statement indicates an apparent reduction in stocks approximating 17 per cent.

Field for Warehouse Development

"As several of the depots erected by the Federal Government during the war are likely to be rented for warehousing or manufacturing purposes, the crowded situation previously existing is likely to be soon relieved. In this field also there have been few projects of any considerable size undertaken during the year, presumably for the reasons already referred to. In this connection however it is noteworthy that there are some very extensive projects, involving heavy outlay, under way or contemplated for the immediate future, largely in connection with the warehousing of cotton, several large companies having been formed during the year to supply warehousing facilities at various inland points and ports, with

special reference to the handling of cotton. In view of the fact that so much of the cotton crop has heretofore been handled under very poor warehousing and handling conditions and in some cases not warehoused at all, there undoubtedly is a large field here for development of warehouse facilities and for the saving of considerable losses which have been entailed on account of the inadequate facilities.

"The Cold Storage facilities of the country have again been taxed to their utmost during the year. The necessity for care and conservation of all available foodstuffs has been impressed deeply upon all agencies concerned and the response has been the crowding of cold storage warehouses to their utmost capacity. The condition has therefore been satisfactory to that branch of the business, as to the volume of business, although numbers of complaints have been made that the rate structure is un-scientific in application to the different services and unsatisfactory in the net returns, owing to the greatly increased cost of fuel, machinery, etc.

"During the year the cost of warehouse labor and clerical help steadily advanced to figures which a few years ago would have been deemed at least improbable. Where possible this condition has been met by revised ratings, but in such adjustments as it has been possible to make, this situation remains, in most cases, an unsatisfactory one and in the majority of cases it may be asserted that the conditions are not adequately provided for in existing tariffs. This situation is due, at least in part, to the fact that until within the last year or two no dependable data was available in regard to labor and handling costs. Some progress is being made in this matter and will show results almost startling in character.

Central Bureau

"As has been announced to members through the Bulletin and otherwise, and mentioned here largely as a matter of record, the General Executive Committee met according to action at the last Annual Meeting, at the Hotel LaFayette, Buffalo, New York, on June 3rd, 1919, to consider and take such action as might be decided upon in the matter of the establishment of a Central Bureau in connection with the office of the General Secretary, for the collection and dissemination of information to the members of the Association, in regard to the classification of goods for storage, handling and other costs. The action of this meeting was unanimous in approving the establishment of such Bureau, believing it fully warranted by the financial condition and resources of the Association and that its value to the members would be very great. In accordance with this action, the work was taken up on September 1st, 1919, and the outlook is most promising. The Massachusetts Warehousemen's Association and the Port of New York Warehousemen's Association have both unreservedly pledged the benefit of all the constructive work conducted by them, past and future and the same co-operation is expected shortly from local Associations in the cities of New Orleans, Chicago, San Francisco, and the Minnesota Warehousemen, with the probability of adding others to this list. It will be noted that this list will be fairly representative of all the sections of our country, excepting perhaps the Pacific Northwest. Many individual warehousemen have also pledged their co-operation.

Membership Changes

"Therefore the ensuing year should see the collection of much useful data, having an immediate value to warehousemen and a great potential value in regard to the conduct and regulation of the industry in the future.

"Membership in the Association is now held by 289 persons, firms and corporations, located in 112 cities of the United States, 7 located in Canada, 1 in Cuba, and 2 in England.

CINCINNATI CONVENTIONS

"The character of the business conducted by these houses is indicated by the list below, showing the number engaged in each of the different branches of the industry.

"B Bonded Merchandise	57
"C Cold Storage	76
"C* Cold Storage of Furs, Fabrics, etc.....	25
"F General Merchandise	202
"H Household Goods	174
"T Transferring & Forwarding	212

"Of these 155 are affiliated with the General Merchandise Sub-division, 121 are affiliated with the Household Goods Sub-division, and 58 are affiliated with the Cold Storage Sub-division."

Treasurer's Report

The report of Walter C. Reid as treasurer showed that the "general fund" balance on hand on November 30 was \$496.79, an increase of \$367.56 over the previous year. The merchandise sub-division's balance was \$2,967.40, an increase of \$1,052.10. The cold storage sub-division's balance was \$889.90, an increase of \$198.16. The household goods sub-division's balance was \$1,465.92, an increase of \$575.87.

Albert M. Read, in his report as chairman of the committee on laws and legislation, said the warehouse receipts act had been adopted by all state legislatures except those of New Hampshire, South Carolina, Georgia, Mississippi, Kentucky, Indiana and Arizona, and that the committee purposed to work for enactment in those states and in Porto Rico.

Legislation

Mr. Read said he has cause for congratulation that the Federal bill of lading act, which the A. W. A. committee was active in formulating and promoting, had been upheld by the United States Supreme Court during the past year. Discussion of laws enacted in various states, notably California, affecting warehouses, and of the prohibition legislation as relating to the storage industry, concluded Mr. Read's formal report.

Mr. Read added that at the request of Mr. Lovejoy he had talked with the chief clerk of the census bureau at Washington and had been informed that the bureau was confronted with more work to do in three years than it could reasonably hope to accomplish within four. Mr. Read accordingly suggested that the A. W. A. take no action at this time toward asking the Government to make a special inquiry of the warehouse industry as part of the Fourteenth Decennial Census. Mr. Read said he believed the bureau officials would favor such an inquiry three years hence if the A. W. A. then asked Congress to authorize it. He declared it was futile to seek the inquiry at the present time.

Banks and Warehouses

In his report as chairman of the committee on banks and warehouses, Edwin Morton said it was "unfortunate" that apparently only little progress had been made toward the adoption of standardized warehouse receipts as agreed

upon between an A. W. A. committee and the American Bankers' Association. On improvement sought by warehousemen and which should be standardized, Mr. Morton declared was incorporation of the clause "All charges payable monthly." This, he said, would enable the warehouseman to conduct his business with far less working capital and to locate errors before they became too old to be readily adjusted.

Mr. Morton urged that banks co-operate more generally with warehousemen. "The warehouseman," he said, "should make it of paramount importance always to do all in his power to protect banks that may be interested in goods in his possession, but naturally he cannot do much if the banks do not lend co-operation to his efforts by advising him of their interests." Pointing out how one large banking institution, having suffered from irregular operation of warehouses whose receipts it held, felt compelled to engage extensively in the warehouse business itself, Mr. Morton added: "This should cause us to stop, look and think." The "reckless practice" by some warehousemen of delivering goods on telephoned or written orders from banks without endorsements of the deliveries on warehouse receipts could not be too strongly condemned, he declared.

Adoption of the practice of making a charge for every negotiable receipt issued and for each transfer of a warehouse receipt was urged by Mr. Morton, who declared that this was rapidly becoming "the prevalent custom in our profession" and that the charge was justified as being clearly an extra service.

Propaganda Among Bankers

Mr. Morton said one of his committee had made "an excellent constructive suggestion in the nature of propaganda—that the A. W. A. prepare a small pamphlet setting forth the safety and advantage of warehouse receipts for collateral, with suggestions as to their proper use and handling." Mr. Morton said it would seem preferable that such a pamphlet be prepared jointly with the American Bankers' Association and mailed to every bank and trust company in this country and Canada. "It would be likely," he said, "to receive more attention and sink in better with the proper people than if issued by our association alone."

The author of the suggestion, Mr. Morton went on, suggested that an A. W. A. member be delegated in each state to address the state bankers' conventions on this subject and that a forceful speaker representing the A. W. A. should address the next convention of the American Bankers' Association. Mr. Morton thought also that "a well written article in the *Bankers' Journal* or even a little campaign of advertising in bankers' literature would be helpful also—serving at least to make the A. W. A. better known and adding to its prestige in financial circles.

Mr. Morton's report was declared by F. R. Long to be one of the most valuable papers ever presented before the

CINCINNATI CONVENTIONS

A. W. A. He urged a committee be appointed to bring the situation to the attention of the American Bankers' Association. At Mr. Lovejoy's suggestion the matter was referred to the board of directors to decide what action should be taken.

Charles H. Kaufman, in his report as chairman of the committee on insurance, declaring that the subject was never before so important as during the war, said the A. W. A. members should give serious conditions to three questions which involve insurance as relating to warehousing—first, "the securing of insurance from a reputable company;" second, obtaining that insurance at the lowest possible cost;" third, "securing a prompt adjustment in case losses occur."

Insurance Important

The first question was cared for by the rigidity of state laws, Mr. Kaufman said. The second was more serious, he explained, because "very often the insurance rate is the deciding factor in the securing of business," hence "care and thought" should be given to the maintenance of all possible fire appliances. "It behooves the warehouseman," he said, "to first, if possible, in building, provide as near a fireproof structure as possible, presenting first the building plans to the National Board of Underwriters for their approval, in order to obtain the opinion of the expert engineers employed by the National Board, and then install a sprinkler system, if possible, and also arrangement of fire doors, fire shutters, closing of all openings, and the enclosure of all elevators, stairways, etc." Mr. Morton added: "Your committee knows of no other channel through which warehousemen can present to the public, as a business getter, than that of being able to store not only household goods but other commodities, especially merchandise upon which negotiable receipts are issued, and to have them housed in a thoroughly modern, up-to-date fireproof warehouse."

New Form of Insurance

Mr. Kaufman held that it was the duty of the warehouseman to acquaint his underwriter "as to the facts of the type of buildings and the rate" which the warehouseman believed to be just. He advised members to inquire of insurance brokers regarding a somewhat new form of insurance—known as "use and occupancy," taking care of overhead and earning expense of destroyed buildings during the time they are unoccupied or unfit for use, and providing also salaries for essential employees. Mr. Kaufman discussed also other forms of insurance, relating to health and motor trucks.

Railroad rulings upon which the warehouse industry looks with disfavor were discussed by F. R. Long, as chairman of the committee on railroads and steamships.

Expressing conviction that members of the A. W. A. favored private ownership of the rail carriers, the report said the committee believed that the rule of paying freight within twenty-four hours after bill is received should be reconsidered, as in the warehouse industry alone an unpleasant burden of extra clerical labor has been made necessary, and the local cashier's offices of the railroads was similarly handicapped. The committee urged restoration of the former plan of the railroads receiving payments once a week, with a view of benefiting business and effecting economy.

Mr. Long's committee urged that the A. W. A. combat "the right of transportation companies to unload and distribute carloads of merchandise at their own expense." The committee held that this was a part of warehouse service and "peculiar" to the industry in all parts of the country.

Divorcement of railroad warehouses from control of the carriers was favored by the committee, which held that the practice of utilizing railroad warehouses was "a form of commercial rebate" which had caused "great loss to the legitimate warehouse business."

The committee contended that where cars were "being handled under the average agreement," credit should be given for cars loaded and for cars unloaded in the first twenty-four hours of free time "to apply an debits to cars unloaded during the month." It was held that this would return to the method of handling average agreement debits and credits which was in effect prior to the time when the Railroad Administration ordered the separation of the loading and the unloading.

Pointing out that large claims were being presented to the carriers for damage to newsprint and book paper in transit, the committee declared that this damage was due to being overloaded.

Mr. Lovejoy, commenting on the phase of Mr. Long's report dealing with railroad warehouses, said the latter were trying to adopt the methods of public warehouses. "When they do," he declared, "we and they will benefit. The members should keep after them to educate them."

Labor Saving Devices

C. W. McDonald, as chairman of the committee on warehouse construction and labor saving devices, declared that the storage man if practical would, before building, investigate to ascertain which type of building was most desirable for his particular line of business—with differences of cost taken into consideration. The subject of labor saving devices, he said, was worthy of study by every warehouseman, and such inquiry "will generally pay big dividends on the investment." After discussing several types of devices, Mr. McDonald said: "I would suggest you study what other warehousemen are doing, and don't

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be too modest to take advantage of their good ideas and apply them to your own business. We should all do as our Boston friends do with their wonderful data on rate making—give the other fellow any information we can that will be helpful to him and take advantage of any ideas that he can give you that will be helpful to you. Take advantage of the courtesies usually extended by one warehouseman to another by going through the other fellow's house and letting him go through yours, and exchanging ideas."

Every member, Mr. McDonald concluded, could "well afford to spend considerable time and money to take a trip to the principal storage centers of the country for the purpose of visiting other warehouses."

William E. Halm, as chairman of the committee on State and Federal regulation of the warehousing industry, emphasized "the necessity of preparation by the warehouse interests to meet impending legislation." Reports from warehouses in Minnesota, Illinois, Indiana and California, where storage interests took the initiative in having legislation enacted, were in the main satisfactory, Mr. Halm declared, and warehousemen should not wait for the law makers themselves to prepare bills.

Armistice Forestalled Regulations

Mr. Halm explained how warehouses "narrowly escaped Federal legislation" during the war after the Government had received complaints of alleged excessive charges by warehouses for storing and handling food products and how the Food Administration asked Mr. Lovejoy to appoint an A. W. A. committee of fifteen to confer with Government officials in an effort to arrive at a fair regulation of rates and practices of all warehouses. "This committee," Mr. Halm said, "convinced the Washington authorities that the Massachusetts methods should be installed throughout the country as the governing principle, and rules and regulations along this line were in course of preparation when the armistice was declared."

How the Port of New York Warehousemen's Bureau was organized was described by Mr. Halm, who gave credit to Massachusetts warehousemen for assistance. The New York organization, he said, was "willing and anxious to reciprocate by passing these inestimable benefits on" to other warehousemen who might call for aid in an endeavor to get out of the depths of unreasonable rates and practices.

Mr. Halm told how the Massachusetts system was applied to the New York Dock Company, of which he is the president, and cited statistics to show that overhead on sill-to-sill handling dropped from 222 per cent last January to 115 per cent in September, the item of non-productive labor decreasing from 64 to 19 per cent, and the overhead on wharf handling from 153 to 96 per cent, with a resultant saving of approximately \$125,000. He continued:

"When the time comes for us to wrestle with legislation or, worse still, with a commission appointed to control us, and we are still making rates based solely on unreasonable competition, we will have a hard time to convince them that we are entitled to a different and better basis. What has been good enough for us for years would seem good enough to a commission to continue. We will then get together and prove that we had been wrong all these years and beg for a chance to improve ourselves. Why not use David Harum's tactics and do it first?"

Will Government Release Army Bases?

Mr. Halm disclosed that the Government offices at Washington in charge of storage at the Army bases "is making inquiries about what rates he should charge for storage" at those bases should they be opened for commercial storage. "If this competition opens up and unreasonably low rates are charged," he said, "a warehousemen's association at these points would have some very effective ammunition to use in appealing to their Representatives at Washington if they conclusively showed that the business was being done at less than cost. And I am sure that some newspapers would make very readable stories about the taxpayers putting up for the losses."

Mr. Halm said it should be borne in mind that bureaus of rate information were not combinations to control rates. "If they are formed for that purpose that are not only counter to the law but will surely fail. Their object is to educate each member to know his own business and when that is accomplished and a man knows his costs he will go very slow in making a rate to get business at less than cost regardless of what a less well posed competitor does."

Warehousemen in every community where there are as few even as three or four storage plants should organize for mutual protection and information, Mr. Halm urged, "and be prepared for the inevitable day of legislation for the industry."

The Central Bureau

Robert L. Spencer reported for the committee on standardization of basis for rates in the absence of the chairman, T. E. Witters. After explaining how the Pittsburgh central bureau was established through conferences in New York and Buffalo, Mr. Spencer presented the following recommendations:

"First—the appointment of a General Central Bureau Committee of five, consisting of a chairman, a vice-chairman and one member from each division. The duty of this committee to be to supervise and direct the policy and operation of the Bureau.

"Second—that each sub-division appoint a sub-committee of from five to ten. The duties of these sub-committees to be to work out the rate and cost accounting problems of the sub-division which it represents and submit results to the General Bureau.

"Third—That this Association make adequate provision for the salary and general office expense of a combined General

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Secretary and Bureau Manager; that each sub-division of this Association appoint and maintain, at its own expense, a clerk whose duties shall be prescribed by the sub-division so appointing such clerk; each sub-division clerk, however, to act in co-operation with and under the direction of the General Secretary and Manager.

"Fourth—In case that either the Cold Storage or Furniture sub-division of this Association does not care to co-operate in the operation and expense of the Bureau, then the general expense of the Bureau shall be borne by the division or divisions so co-operating."

The committee reported that it could not go out of existence without conveying to every A. W. A. member "in as strong language as possible" a message urging them to carry out "with money and energy" the work begun.

"We have become firmly convinced," the report read, "that the future prosperity, not to say the very safeguarding of your investments, requires immediate action on the part of every member. Our motto, if we adopted one, would be 'KNOW YOUR BUSINESS.'"

"Know Your Business"

"In order to know your business it will be necessary to put a cost system into your plant based on the principle of factory cost systems in general use in other lines. This consists of:

"1. A balanced division of the pay roll by the use of time cards.

"2. The allocation to lots or kinds of merchandise of all productive labor.

"3. Division of the overhead to storage, handling and other special departments.

"4. Finding the percentage of overhead to be added to different services to obtain true cost.

"This information will form the basis for holding to a proper level and defending rates before bodies of shippers or Public Utilities Commissions."

The report urged warehousemen to fraternize and co-operate with competitors and break down the barriers of distrust and suspicion which lead to "rate cutting and kindred evils;" to "eliminate free service;" charging for all service of any importance and thus "distributing the burden to where it belongs;" and to contribute enough money and co-operation "to secure collective data for the section in which you operate and pass it along to the Central Bureau that it may become of value to the warehouse industry of the whole country."

The report pointed out that although the merchandise sub-division had been the first to work for a uniform basis for establishment of rates, the results would be equally adaptable "and fully as vital" to the cold storage and household sections; and that by pushing the matter of uniform cost accounting and co-operation the A. W. A. would become "a powerful ally to the individual warehouseman." The committee said that it believed that with the creation of the Pittsburgh bureau its own terms of usefulness terminated, and asked to be discharged.

When the general meeting of all sub-divisions was resumed on Friday Mr. Curtis announced the personnel of the cost account committees to co-operate with the Pittsburgh bureau. After the commodities had once been classified for storage purposes, he explained, classification could be made uniform in San Francisco as well as in Boston, at the various ports as well as at interior points. The varying rules of the several State utilities commissions might be applied to the local warehouse businesses, he said, but the classification itself would be uniform. Mr. Criss explained the cost handling system in relation to overhead costs, which are not constant because labor conditions vary.

Cost Accounting

Mr. Nichols took up this phase of the discussion, saying: "You'll get out of the bureau just what you put into it. You've got to work yourselves. You've got to study yourselves. You must put your brains and your work into your business. The bureau can't do that for you. The bureau is intended to stimulate you to put a little more intelligence into your business methods than you have before. The bureau is working with information it has already received from New York and Boston. Chicago has turned in information which will be valuable, and the bureau has learned that Kansas City also has information. The bureau presents the opportunity to bring together all this information and put it into practical working order so that it can be distributed intelligently. The bureau will be at work on this for months; and I hope that before the information has been ground in the mill, there will be information coming from other communities.

Rate Inquiry Expensive

"We are now spending, in salaries for men employed in this work, more than \$22,000 a year. There is not a man who is spending this money who is not convinced that it is being well expended. This association ought to be spending \$200,000 a year on this work. Every man is getting back ten dollars for every dollar expended."

Mr. Halm declared that the cost handling forms prepared by the New York warehousemen should serve as kindergarten lessons for other communities to work with, adapting these forms to their own conditions. Mr. Criss announced that the forms were being prepared for distribution so that the other communities could assemble data to be sent to the Pittsburgh bureau. Continuing the discussion, Mr. Spencer said:

"The bureau can under no circumstances attempt to make rates for you. State utilities commissions and other such bodies must be respected. The bureau will give only a basis for making rates."

Mr. Haslett said San Francisco would co-operate in

(Continued on page 50)

READERS FORUM

DISTRIBUTION & WAREHOUSING will welcome receipt of letters from men in the warehouse and distribution fields who have something worth while to say for the benefit of others. Communications of this character should be addressed: Readers' Forum, *Distribution & Warehousing*, 239 West 39th Street, New York City.

INADEQUATE VAN PRICES

"DISTRIBUTION & WAREHOUSING,
"239 West 39th Street,
"New York City.

"Gentlemen—I wish to convey to the van owners, through your valuable columns, a few thoughts on prices. For a Ford taxi, they get \$3.00 per hour, and more expensive automobiles, \$4.00 an hour, and contractors pay \$5.00 for a motor truck with a dump hoist. The poor motor van men in the United States are not getting anywhere near the price they ought to have for moving furniture. Is there any reason why a man, sending an expensive van, which cost as much as any kind of motor vehicle, should not get as much per hour as a mover of dirt, stone, coal or gravel.

"The price in Syracuse has been so much for a van load, by the hour, but there is no man moving furniture who can get anywhere near the money a truck with the dump hoist body can get. Then we have the breakage and damage and insurance that we have to pay in addition. It seems to me that all the truck men should charge by the hour for a motor van, and this price should be known all over the United States. Help now costs anywhere from forty to fifty-five cents an hour at inland cities and a motor van should be rented at so much for the van with the driver, and the furniture carriers should be so much an hour, not less than seventy-five cents, and the motor van should be at least \$5.00 per hour, but there is no one in the furniture moving business who receives this on the average. There might be a few exceptions, where a very long distance trip might bring in \$4.00 an hour.

"It costs just as much to run a motor in Syracuse as in New York, the only difference being cost of housing, and so prices should be about the same. No one can run a truck cheaper than his neighbor. The trouble is that new truck and van owners do not realize what it costs to run their trucks, and so they work for less than they should.

"In Central New York we are not paying much attention to return load—that is, throwing off in price for return load. I think if all van owners would refuse work out of other cities, accepting only work where they reside, they would be benefited. No one is moving furniture just for the fun of doing it. And to my

mind the van man gets less money and more blame than any kind of motor vehicle owner. He ought to get more, as he runs more risks, it costs him more to run his business.

"If a dump truck receives \$5 per hour on Government and contractors' work, a van should get at least \$6 per hour and additional charge for each helper.

"The hoist truck owner has no office, no books or bookkeepers; a telephone even is not necessary; but a van man must have them all.

"The hoist dump truck owner gets more days of work in a year, and he can

lay up in winter and stop expense. The driver of a hoist truck need know nothing except how to drive, but the van man must know how to handle pianos and delicate and expensive furniture.

"This letter is not a protest against the money hoist dump owners receive, but is intended to educate van owners to the situation. We have not been getting enough money and never will until prices paid to motor vehicles on other work are taken into consideration.

"Van owners: Charge by the hour for your vehicle, and so much per hour for helpers, and you will not be guessing.

"W. E. HOOLSWAY,
"Syracuse, N. Y."

The Omitted Line

THE office manager of the Twentieth Century Storage Warehouse Company of Philadelphia is supposed to boss the stenographers, the bookkeeper, the clerks and other employees, but the company's chart as reproduced in the October issue of *DISTRIBUTION & WAREHOUSING* failed to indicate this important fact.

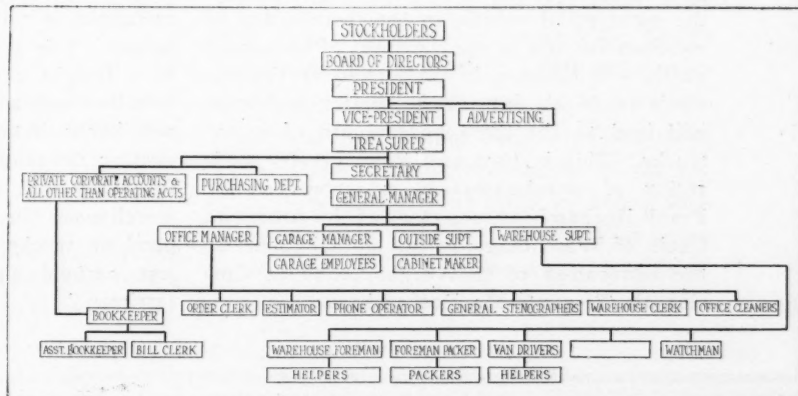
This chart as then published, leaves the office manager somewhat isolated, and not in a position to order anyone around. The chart as it should have been published, and which is shown herewith in its correct detail, proves that the office manager really holds an executive position.

The mistake occurred through a short line being omitted by the engraver. This short line drops from the box containing "office manager" to line of connected

boxes containing "order clerk," "estimator," "phone operator," etc. Publication of the corrected chart this month is done with the thought that one or more household goods warehouses may have decided to experiment with the Twentieth Century Storage Warehouse Company's departmentization system, which was described in the October issue.

Escape Coal Shortage Ban

CHICAGO, Dec. 17—When the coal shortage became acute and the Brown Portable Machinery Co. was notified that electric current would be curtailed because the industry had been classed as non-essential, the management succeeded in keeping going by setting up gasoline motors to operate line shafting and the generator to furnish light. Coal was burned only for heating purposes.



Editor's Pages

Co-operation; An Instrument

WHEN traffic manager met warehouseman in conference at Cincinnati last month they agreed to agree on a number of things. Also they disagreed about agreeing on another number of things. As to how shipments should be addressed—whether to the warehouseman direct, or in the traffic manager's name in care of the storage owner; as to the impracticability of devising standard forms for monthly reports; as to the traffic executive's willingness to pay for extra services performed—on these points the conferees arrived at a more or less potential understanding. And the warehousemen's committee members returned to the floor of the convention with an optimistic report.

What took place on the following day, when traffic representatives met by themselves without a warehouseman being present, will be a revelation to the storage owners and a shock to their optimism. An account of the traffic men's own meeting appears elsewhere on these pages, and it discloses a few of the opinions which the traffic managers held in reserve at Cincinnati and which they did not express while the warehousemen were present.

There has been cumulative evidence of the necessity of a co-operative relationship between

manufacturing interests and the warehouse industry; the situation at Cincinnati supplied added emphasis that this is so. And that it is so was recognized by the traffic men when they decided not to allow the efforts begun at the convention to die abortive. These efforts are to live, grow and become fruitful with the passing months if the manufacturers throughout the country can be sold on the idea. The aim of the traffic man's advisory committee organized at Cincinnati is to do this selling. The American Warehousemen's Association through its board of directors can be of invaluable assistance in this endeavor and should do everything within its power to foster and develop the movement begun when the association's retiring president invited the traffic men to Cincinnati to discuss problems which were wedges in the co-operative relationship desired.

Who is going to remove these wedges? The traffic managers cannot do it alone. The warehousemen are equally powerless to do it if unaided by the manufacturers' representatives. Co-operation of a constructive character and based on permanent good will and on the realization of the value of the results to be obtained—of such metal is the instrument of removal made.

The Automobile Shows

PREDICTIONS are that 1920 will be the most prolific production year in the history of the motor truck. The importance of the commercial vehicle in the distribution of merchandise and in the transport of household goods will increase in proportion as the nation's roads are improved. Better highways will lead to the more general use of motor trucks. This in turn will mean greater utilization of warehouses—as is recognized by Frank Rochambeau, secretary of the American Chain of Warehouses, in his annual report at the convention of that organization at Cincinnati: To quote Mr. Rochambeau:

"The question of good roads is one of great interest to public warehouses. The more long distance hauling we are able to do, the more merchandise will be stored in public warehouses. The growing value of the auto truck as a freight carrier makes the state of our country roads a matter of prime interest. Shippers know that railroads handle carloads with greater despatch than less carloads. Therefore they will ship carload stocks to public warehouses throughout the country and depend on trucks and good roads to distribute less carload shipments to the surrounding territory."

Mr. Rochambeau reflects the opinion of thinking warehousemen generally. It is the thinking warehouseman who is going to attend—or be represented by his truck superintendent—the highway transport conferences held in connection with the annual automobile

shows at Chicago and New York in January. Good roads discussions, and the exhibition of trucks built for merchandise distribution and household goods moving, are show attractions of incalculable value to warehouse and transfer men.

More or Less Seasonal

WELL, IT WASN'T QUITE THAT BAD.

A warehouseman in our town,
He went to Cincinnati
And studied rates and costs and things
Until he was quite batty,
And when he found that he was crazed,
He hopped upon a train
And got back all his sanity
By coming home again.

* * *

A newspaper estimate was that 60,000,000 gallons of liquor was in storage in bonded warehouses ready to provide holiday cheer on Christmas Day if the U. S. Supreme Court decided that wartime prohibition was unconstitutional . . . but the "wets" were given no chance to cheer.

* * *

Our English language should be reformed. One traffic manager went to Cincinnati because he was sold on the idea. Another refused to go because he was afraid he'd be sold.

* * *

The warehouseman gets publicity by advertising. The clam sits tight and says nothing and gets just as much publicity—but who wants to be a clam?

* * *

Another type of labor-saving device would be to force the radical workers to partake of a potion of the homely philosophy of our forefathers.

* * *

If San Francisco gets the next A. W. A. convention the Atlantic Seaboard members who go will probably try to take advantage of the carload rate.

* * *

The members of the furniture sub-division have sent a man into the presidency of the A. W. A.—they wanted to be in the van.

The warehouseman who keeps a customer's love-letters should have his plant well-equipped with a sprinkler system.

* * *

"Many a cold storage man," said the cynic, "would like to take his plant with him when he dies."

* * *

Distribution is the problem not alone of the traffic manager—this is Leap Year.

* * *

Speaking of decreased distribution costs, skirts are going to be shorter this year.

* * *

The warehouseman without a sense of humor should do a good dry storage business.

* * *

The transfer man who discards equine for motor equipment shows horse sense.

* * *

Discussion about motor truck maintenance often becomes tiresome.

* * *

Mechanical trailers are to be commended; human ones, condemned.

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WHEN teas which are imported from Japan by way of America's Pacific Coast have to be brought 3,000 miles overland to eastern warehouses to be re-conditioned and then shipped back across the same 3,000 miles to reach consumers in the far west, there is something radically wrong with our methods of distribution. That situation prevails today. It explains why the costs of distribution are going up.

CAROLINA FINANCES WAREHOUSE SYSTEM

To Aid Farmers Under Cooperative Plan to Dispose of Cotton and Other Crops

RALEIGH, N. C., Dec. 4—North Carolina's cotton finance system is described in a pamphlet issued by the North Carolina State Board of Agriculture. A copy of the document may be obtained from James P. Brown, Assistant in Warehouse Regulations, U. S. Department of Agriculture, at Box 729, Raleigh, N. C. The pamphlet gives in full the law, rules and regulations which govern the administration of the State's system. The law was enacted for the purpose of enabling the farmers, merchants and bankers of North Carolina to establish a State warehouse co-operative organization.

Warehouse companies are being formed in many of the leading cotton-producing counties of North Carolina—in the northeastern section, to store cotton and peanuts; in the section bordering on the sounds, to store cotton, corn and soy beans; and in the southern section, to store cotton and tobacco.

It is the purpose of the organization to enlist the support of farmers and to induce them to adopt the plan of having all cotton weighed, graded and stored in a State warehouse, through incorporating under the State's co-operating law. The organization of a warehouse company under this co-operating act gives the stockholders greater authority than under the corporation law.

Under the co-operative law, the members limit membership to those who are agreed in their interests and purposes. Thus, a co-operative organization recognizes that "a house divided against itself shall fall." The amount of stock owned by one person may be limited so as to assure the widest possible distribution of ownership and, therefore, enlist the greatest number in the storage of cotton. Voting is restricted to one vote to each member, irrespective of the number of shares owned, in order to prevent a few from using the organization contrary to the interests of the farming community at large.

Profits above expenses of operation, including a deduction to cover depreciation, and 6 per cent. return on capital stock are pro rated to the shareholders in proportion to the amount of cotton stored, so as to reduce cost of storage to a minimum. The reduction in the cost of storage is considered the most effective means of encouraging the widest possible storage of cotton in warehouses. An organizer to assist farmers, merchants and bankers to form a warehouse company will be made available upon request to the Division of Markets, of the U. S. Department of Agriculture, at West Raleigh, and by-laws and an application for charter will be furnished. Building plans to meet insurance re-

quirements and reduce its cost to the lowest possible rate will be furnished, also.

Under the North Carolina system the State Warehouse Superintendent is authorized to keep a daily record of cotton bales in storage. This record will include official information as to the number of bales located at each warehouse, and the weight, grade and staple of each bale. This information will enable the superintendent to carry out the provisions of the law giving him authority to market cotton stored in warehouses upon application, and to acquaint the trade by letter or telegraph where cotton of a desired grade and staple may be found in North Carolina.

A guarantee fund will stand behind every warehouse receipt. This fund will within two years amount to \$400,000 and should make North Carolina warehouse receipt as negotiable as a Government bond—and, therefore, be the very best security.

Before a manager of a warehouse can issue a negotiable receipt, the cotton must be weighed by an official weigher; graded by a State or Federal grader; the weight and grade entered on the warehouse receipt signed on the back by the one storing the cotton, to show that the cotton is free from lien or other form of obligation; and, finally, the receipt must be signed by the manager—who must be bonded under from \$1,000 to \$10,000, depending on the capacity of his warehouse—and by the official weigher and by the State Warehouse Superintendent. This warehouse receipt may then be sold by anyone owning it; and the warehouse manager is obliged to deliver the cotton to anyone presenting or mailing in the warehouse receipt, providing it has been properly indorsed.

PROHIBITION HITS HUB WAREHOUSES

BOSTON, Dec. 18—The United States Supreme Court, upholding the constitutionality of the wartime prohibition law was a blow to some of the owners of big stocks in warehouses in this city. It is said the Quincy Market Cold Storage and Warehouse Company has some 300,000 gallons of liquor in its custody, and that the Joseph S. O'Neil Bonded Warehouse No. 1 at Cambridge has 100,000 more. There are probably thousands more gallons in smaller warehouses. As Boston is a tidewater city, there is the possibility of shipping it to Cuba and other places if steamers are available. The United Fruit Company operates steamships between Boston and West India ports and if orders can be placed for the goods it will have a better chance than some of the liquors in the warehouses in the Middle West that would have to be shipped to the coast before transportation. Meanwhile, the storage charges are piling up and the owners are said to be disheartened.

FURNITURE MEN TO ASK RATE REVISIONS

Michigan Traffic Executives Hear Industries May Protest Consol- idated Classification

GRAND RAPIDS, MICH., Dec. 5—Information that the furniture industry as a whole plans to ask the Interstate Commerce Commission for a complete revision of furniture rates under the consolidated freight classification was given to the members of the Grand Rapids Traffic Club to-night by C. S. Bather, of Rockford, Ill., shippers' representative, on the Chicago Eastern District Freight Traffic Committee.

Bather, principal speaker at a dinner and meeting held by the Grand Rapids organization at the Grand Rapids Furniture Club, analyzed the consolidated classification, pointing out what many shippers have declared are inconsistencies. He indicated that many other industries besides those handling furniture would file complaints with the Interstate Commerce Commission. Some of the furniture advances show lack of uniformity in the three territories which formerly had individual classifications.

Members of the Michigan Traffic League were guests at the dinner here. E. C. Nettles, of Battle Creek, secretary of the league, was toastmaster.

Plan Warehouses for Arizona Cotton

PHOENIX, Ariz., Dec. 5—Bonded warehouses and cotton compresses in the Salt River Valley were urged as necessary for the development of cotton growing in Arizona, at a meeting of the Maricopa Realty Board, held here. S. J. Buckingham of the Central Bank of Phoenix said these would save banks trouble in money on cotton. It would further avoid inconvenience in shipping cotton east for storage, he said, and having it gain or lose weight in transit. John J. Phillips, an organizer of the Arizona American-Egyptian Cotton Association, said farmers were in favor of the warehouse and will pledge their cotton for the purchase of stock.

Build in Milwaukee

MILWAUKEE, Dec. 15—Work has been started on the warehouse of the Milwaukee-Waukesha Delivery Co., which when finished is promised to be one of the finest storage buildings in the Northwest. Special dust and moth-proof rooms for the storage of perishable articles are to be features. Temperature regulated rooms for storage of articles affected by weather changes will also be provided.

Furniture Fills Storage

CINCINNATI, Dec. 22—Shortage of homes here is reflected in storage warehouses bulging with furniture. For the last year more furniture has been stored in Cincinnati than ever before, according to warehouse owners.

TRUCK SHOWS SAVING OVER FREIGHT RATES

Elimination of Crating Cuts Cost of Transportation From Factory to Warehouse

NEW YORK, Dec. 15—An interesting experiment in the reduction of freight costs by switching to truck delivery has been made by the Germania Mills of Holyoke, Mass., in its shipments from the factory to its warehouse in New York. By carrying manufactured goods from the factory, and raw materials and supplies on its return trips, the truck is showing a substantial saving in time and money over former freight costs.

When the company was first approached by the representative of a truck manufacturer, it was first disinclined to believe it even necessary to make a survey of its transportation problem, as prevailing freight rates were so low, it was thought impossible to effect a saving by truck operation.

Investigation showed, however, that while the actual shipping costs were low, the expense of boxing shipments as required by railroad regulations was a considerable item. Furthermore, it was shown that for every six pounds of material shipped there was one pound of boxing required which carried the cost of shipping one-sixth higher.

Using a van body on a truck it was disclosed that boxing could be eliminated. With this analysis complete and a freight and express embargo operating to support it, the company tried the truck experiment. The truck is now in regular service.

New England Club Elects 1920 Officers

BOSTON, Dec. 6—William F. Garcelon was elected president of the Traffic Club of New England, at the annual meeting and dinner in the Copley-Plaza Hotel, Boston, Dec. 4. Jacob Karcher, retiring president, presided, introducing Henry L. Harriman, vice-chairman of the Massachusetts Commission on Foreign and Domestic Commerce, who was the speaker of the evening.

Other officers elected were: Percy R. Tood, C. E. Mayer, W. T. La Moure, freight traffic manager of the Boston & Maine railroad, and T. O. Sheldon, vice-presidents; C. A. Anderson, secretary-treasurer; E. W. Abbott, F. W. Hunt, James L. Truden, D. L. Taylor, James E. McGrath, C. F. Marden and P. L. Stuart, directors.

Big Five Must Quit Warehouse Business

NEW YORK, Dec. 20—When the "Big Five" decided to retire from all business except that of meat packing and dairy products, under the agreement announced by Attorney General Palmer

yesterday, they agreed, among other things "to dispose of all their interests in public cold storage warehouses, except as necessary for their own meat products."

In a recent report of the Federal Trade Commission to President Wilson, it was shown that the packers together operated 44.8 percent of the total cold storage capacity of the country.

The report said: "They controlled in this way nearly half of the non-freezing and a trifle less than a third of the freezing space." Including the space leased or occupied without lease which they did not operate, the packers were on March 31, 1918, interested in 48.1 percent of the total cold storage capacity of the country, it was charged.

THE value of the article which, appearing in the October issue of DISTRIBUTION & WAREHOUSING, described the "operatorless elevators" which the Government installed at its Brooklyn Army base during the war, is emphasized by a statement issued at Washington on December 4. In the daily digest of reconstruction news circulated on that date by the Council of National Defence, appears the following items:

"Chief of Construction (War Department) announces that during war Construction Division of Army has contributed something new and epoch-making to terminal engineering and commercial warehouse operation in securing maximum elevator efficiency. At Army Supply Base in Brooklyn there are 96 elevators now in use following this system."

COLUMBUS STORAGE BUSINESS IMPROVES

COLUMBUS, OHIO, Dec. 20—There has been active business in transfer and storage lines in Columbus and central Ohio territory during the past month. Merchandise storage has shown particular improvement. Canned goods, apples and cereal have been stored in greater volume. Sugar because of its scarcity, has been entirely lacking in the business.

It is estimated that about 85 to 95 percent of the available merchandise storage space in Columbus warehouses has been in use. Freight movement has increased under the influence of a better car supply and this is reflected on the transfer and storage industry.

TOWNSEND BILL GETS STRONG ENDORSEMENT

Mississippi Valley Association Takes Favorable Action at Annual Convention

WASHINGTON, Dec. 15—The Mississippi Valley Association, in annual session here, passed a resolution to Congress, unanimously and without discussion, in line with the principles employed in the Townsend Bill now pending before the United States, looking to the enlargement of the Bureau of Public Roads into one of the most active branches of the Federal Government.

Specifically, the resolution states that "based on information gathered in the States of the Mississippi Valley, the conclusion of your petitioners is that the Bureau of Public Roads should be enlarged into one of the most energetic and useful in the Department of Agriculture and that the present Federal Aid system be undisturbed."

The Association recommended further that the present Federal Aid system be undisturbed, which is also in line with Senator Townsend's measure, the only point of difference being that the measure now in the hands of the Senate Committee on Post Offices and Post Roads, and of which Senator Townsend is Chairman, provides for a national highway system under Federal construction and maintenance, in addition to a continuation of the Federal aid policy. It also recognizes not only the necessity for the enlargement of the Bureau of Public Roads, but provides that the Federal Administration be placed under a separate body whose sole function will be the study and administration of highway affairs, independent of any other branch of the Government. It is pointed out that this plan is consistent with the precedent set by the Department of Agriculture in requiring the organization of State highway departments separate and distinct from the other branches of the State Government before the State can participate in Federal Aid.

Uphold Storage Laws

COLUMBUS, O., Dec. 22—The State supreme court in a decision recently handed down, upheld the right of the State of Ohio to seize and sell at auction, foodstuffs which have been held in cold storage for longer terms than specified in the State cold storage law.

File Monthly Reports

LOS ANGELES, Dec. 5—Under the warehouse regulating ordinance adopted by the city recently, cold storage plants and warehouses must file bi-monthly reports with the municipal market superintendent, showing the date that goods are put into storage, the amount on hand, what the goods are and the quality. The aim of the measure is to prevent hoarding of foodstuffs and profiteering.

OHIO TRUCK LINES MULTIPLY BUSINESS

Eight Established Motor Routes Speed Shipping Between Great Lakes Cities

CLEVELAND, Dec. 10—Data compiled and just published by a ship-by-truck bureau here show that the movement has grown by leaps and bounds since its inception in the late days of the world war, until today all northern Ohio is covered thoroughly by the trucks that daily leave this city hauling freight and express worth thousands of dollars.

Today there are 35 Cleveland truck transportation companies hauling goods throughout northern Ohio, and the success of the service is attested by the fact that the patrons are multiplying and there is plenty of profitable business for all in the work.

Eight routes have been laid out and the trucks traverse them daily, and on a schedule, which is maintained. Shippers assert that the trucks beat the time of the railroads in the territory that is covered and this has been a great factor in building up business.

Route No. 1: Cleveland to Lorain, Sandusky, Port Clinton, Toledo, Detroit, and Tiffin. This route extends across the entire northern part of the state, and into Michigan. This has been a very profitable route, as the territory traversed is densely populated, and there are plenty of large cities to draw business from.

Route No. 2: Cleveland to Berea, Elvira, Oberlin, Norwalk, Bellevue, Greenwich, Plymouth, Bucyrus, Delaware and Columbus. This route strikes one of the richest agricultural sections in the commonwealth and connects Cleveland with the state capital—Columbus—with a direct route that is much shorter than any of the railroads.

Route No. 3: Cleveland to Berea, Medina, Ashland, Mansfield, Wooster, Shreve, Loundonville, Mt. Vernon and Newark.

Route No. 4: Cleveland to Bedford, Hudson, Akron, Barberton, Canal Fulton, Orrville, Massillon, Canton, Dover, New Philadelphia, Uhrichsville, New Comers-town, Coshocton and Zanesville.

Route No. 5: Cleveland to Bedford, Hudson, Ravenna, Alliance, Washingtonville, and connecting with the Pittsburgh division.

Route No. 6: Cleveland to Bedford, Hudson, Ravenna, Warren, Niles, Youngstown, Sharon, Pa., New Castle, Pa., Beaver Falls, Pa., and Pittsburgh. This route goes through the so-called steel section—a country that is filled with steel mills and in which a vast amount of freight moves. The route has been developed into a profitable one, and truck men assert that although they enjoy good business, the possibilities have just been scratched to date.

Route No. 7: Branching below Beaver Falls, Pa., for connection with East Liverpool, O., Steubenville, O., and nearby Pennsylvania towns to Wheeling, W. Va.

Route No. 8: Cleveland to Willoughby, Chardon, Painesville, Geneva, Ashtabula, Erie, Pa., and to Buffalo, N. Y.

Under these routes that have been laid out it is possible to ship goods by truck from Buffalo to Detroit. Leaving New York City at the eastern extremity of the Great Lakes the trucks follow the shore lines of the lakes to Erie, Pa., thence to Ashtabula, to Cleveland, to Sandusky, to Toledo and then to Detroit. Considerable through business for the four large cities, Toledo, Detroit, Cleveland and Buffalo, is now handled by the trucks, and prophecies are made for a great expansion of shipping by trucks in the next year.

DIXIE WAREHOUSE CO. IS INCORPORATED

JACKSONVILLE, Fla., Dec. 5—"Best Service at Minimum Cost" is the business motto of the new Dixie Warehouse Co., recently incorporated here, with quarters in the center of the shipping district, for the purpose of doing a general warehousing, distribution, forwarding and drayage business. The directors are all prominent business men of the city, and E. A. West, as manager, is a warehouse man of extended experience, well known among shipping people of the Southeast. Regarding the establishment of the company Mr. West says:

"The directors of the Dixie Warehouse Co. have long realized the growing character of the warehouse business men and the corresponding opportunity for a strictly modern distribution medium, located so as to facilitate reshipping on a large scale and to insure minimum costs and service rates.

"Especially have we realized the strategic location of Jacksonville, easily accessible to all parts of the Southeast by water and rail, as well as to Eastern ports and the larger manufacturing and mail-order centers of the North and Middle West. We could not fail to see what this port has been losing for the past decade because of its failure to cater to the needs, the crying needs, of non-resident shippers who have been forced to pay excessive distribution rates or to open their own warehouses.

"Our immediate problem was to find a home that would at once afford us advantages of location, space, etc., for such a business. We have waited several months and our patience has been rewarded in a peculiarly satisfactory manner. In short, we could ask nothing better in any respect. It was simply up to us to go to work.

"It remains only to say that our modern equipment, inside and out, is proving itself, our clientele is of the best, and already we are looking about for lines of expansion."

DEEPER WATERWAYS CHAMPION SUCCUMBS

Geo. D. Babbitt, Advocate of Hudson River Project, Dies After a Short Illness

ALBANY, N. Y., Dec. 12—Leaders in the civic and business life of Albany are mourning the death, on Dec. 5, of George D. Babbitt, first vice-president of the Chamber of Commerce and an ardent advocate of the Deeper Hudson River project. Mr. Babbitt was stricken soon after his return from the Atlantic Deeper Waterways' association meeting.

So thoroughly was Mr. Babbitt a part of the movement for the deepening of the Hudson and for the extension of commerce on the barge canal that he was sometimes known among his friends as "Deeper Waterways" Babbitt. He had spent much of his time and his money toward this end.

At the time of his death Mr. Babbitt was chairman of the Deeper Hudson committee of the Albany chamber, a member of the Atlantic Deeper Waterways association, the National Rivers and Harbors congress, and was named by Governor Smith a delegate to the congress in Washington. In addition to these activities he recently was elected a vice-president for New York state and a member of the ways and means committee of the Atlantic Deeper Waterways' association.

An interesting article pointing out to national distributors how and why many transportation authorities believe that the Hudson river, and Barge Canal could be utilized more extensively for merchandise transportation, written by Mr. Babbitt, appeared in the December issue of *DISTRIBUTING & WAREHOUSING*.

Elect New Members

CHICAGO, Dec. 22—New members of the Illinois Furniture Warehousemen's Association are the Monarch Transfer & Storage Co., Kansas City; Yonkers Storage Warehouses, Yonkers; Hastings Express Co., Chicago, elected to active membership, and the Safety Transfer & Storage, Inc., to associate membership.

Issue First Order Under Storage Law

ST. PAUL, Minn., Dec. 22—Thousands of pounds of food products will be thrown upon the market, as the result of an order by N. J. Holmberg, state commissioner of agriculture, which requires all food supplies taken into Minnesota cold storage warehouses before August 16, 1918, to be placed on sale within ten days.

This is the first order issued by the State agriculture department under the new Minnesota cold storage law, passed at a special session of the legislature in September to combat the high cost of living. Officials of cold storage plants declare the effect of the order would be negligible.

MOTOR TRUCK OWNERS FORM BAY STATE CLUB

Plan to Establish Return Loads Bureau and Combat Legislation Adverse to Industry

BOSTON, Dec. 12—The Massachusetts Motor Truck Club was started on its active career at the Boston City Club last night when about thirty men representing different lines of industry met and elected James J. Scully of Cambridge president, Norman Halliday a director and Dwight W. Sleeper secretary.

The organization has been chartered under Massachusetts laws. For some time it had been in process of formation, and at a meeting recently there were present about fifteen men who had signed membership cards. On Thursday night Mr. Sleeper said that the number was growing, and every one who attended and had not joined became a member. They were all placed on the membership committee to build up the organization.

Outlining the plans for the association, Mr. Sleeper dwelt upon the many things that could be accomplished through organized effort. The problem of legislation was shown to be a vital one. Co-operate efforts were urged upon every one. Mr. Hall, representing the Furniture Movers' Association, said he would request his organization to join as a body.

After Mr. Scully was elected president he reviewed legislation, relating to motor trucks year after year, and the hard task it has been to combat the efforts of those who desired to drive trucks from the highways. He urged the men present to plan frequent meetings from now on to build up the organization.

Norman Halliday gave some instances on what the owners must expect in the way of taxes, and he urged those present to attract all the members possible from among the owners. He promised to do what he could.

Mr. Hall of the Furniture Movers' Association stated that the one reason his organization remained in existence was to defeat every year one bill which comes up which would compel all movers to notify the city and town authorities of every load they carried, where from and where to, in order, he charged, that the credit men of merchandise houses could use the furniture men as detectives or policemen. The bill has been defeated four or five times through the organization, Mr. Hall said, and the members of the new organization could aid in checking adverse motor truck legislation.

Mr. Hopkins, an authority on trucks, charged that certain street railways had succeeded in ruling jitneys off the roads in some parts of Eastern Massachusetts by boycotting cities and towns where jitneys operated, and he declared that the steam railroads might be sufficiently

influential to put motor truck firms out of existence when they were restored to private control, through some such system. He cited two instances where, he said, his vehicles had been held up charged with traffic violations in cities outside of Boston, found guilty in a lower court, and an appeal proved innocent, but at a cost to him of \$120. In one instance he had a trailer, and it was claimed it was illegal. Again his truck was said to be too long, but on being measured was 10 ins. inside the limit. Some officials were not familiar with the law, he declared.

The new organization will try to establish return load bureaus.

BIXBY & COMPANY, of Brooklyn, manufacturers of shoe polish, a company which utilize sixty public warehouses to handle 62.5 per cent of their distribution business, has issued a twelve-page pamphlet containing maps prepared by DISTRIBUTING & WAREHOUSING for the purpose of enabling the warehouse and manufacturing industries to visualize the extent of the Bixby activities. Each pamphlet reprints from DISTRIBUTING & WAREHOUSING quotations relating to the basic principles upon which traffic managers build their distribution successes. Warehousemen and traffic executives may receive copies of these pamphlets upon application.

CENTRAL CLUB WILL CONVENE ON JAN. 13

KANSAS CITY, Dec. 23—The convention of the Central Warehousemen's Club, postponed from December 16 because of the coal strike situation, is to be held at the Hotel Baltimore here on January 13, 14 and 15. A unique circular issued by the Kansas City Warehousemen's Association under the title "Let's Hop and Chirp and Make Gurggly Noises," announces that traffic managers who distribute through warehouses will attend the meeting. This is following the example set by the American Warehousemen's Association in having traffic executives at that organization's convention at Cincinnati. "A whole lot of wise traffic men," the circular reads, "have been invited—men you do business with—and are coming to get acquainted with you." The household goods section has arranged a program also. Merchandise distribution will be discussed on Jan. 13 and 14, and the household goods situation on Jan. 15.

The warehousemen and traffic managers from other cities will be the Kansas City association's guests on the nights of January 13 to 17 inclusive at theatre parties, dinners and other social affairs. The committee arranging these has been authorized to spend \$5,000 for entertainment purposes.

CAR SHORTAGE FELT IN DENVER DISTRICT

Co-Operation With the Railroads in Unloading Shipments Urged by Traffic Authority

DENVER, Dec. 16—Working with the railroads, instead of against them, will accomplish a great deal toward solving some of the warehouse manager's main problems, according to H. E. Dunn, traffic manager for the Weicker Transfer & Storage Co., one of the largest warehousing firms in the Rocky Mountain territory.

A few days ago, as an illustration, this concern received three carloads of phonographs for a customer. As the cars were switched rather late in the day and during a rush of work there was no chance to start unloading until nearly closing time. Instead of letting the cars wait until the next day, however, Mr. Dunn conferred with the first vanman who came in and arranged for them to take care of the nearly 450 phonographs immediately. This released the freight cars in time to give the railroad employes a substantial accommodation.

By this policy, the Weicker firm keeps its credit for early release of cars well ahead of all demurrage charges for inevitable delays.

An idea of the efficiency of this company's system of handling goods is furnished by the fact that it recently handled thirty-two carload shipments in one day, in addition to local l. c. l. shipments and heavy haulage of merchandise and household goods throughout the city and vicinity.

Getting cars to ship goods in any direction except East is a problem confronting warehousemen in this territory now. This is explained as due to the heavy demand for empty freight cars by Eastern factories.

Shifting labor continues as a complexity but the leading firms state they are gradually getting accustomed to this condition and are using increase systematizing to make the labor problem less annoying than it was at first.

Motor cars, canned goods and furniture have shown an extra heavy movement in the regular merchandise class during the past month; fruits, eggs and creamery products have been leaders in the cold storage class.

About 90 per cent of the regular merchandise space is reported filled in the leading warehouses, with an average of about 95 per cent given as the amount of cold storage and household goods space filled.

Build in Baltimore

BALTIMORE, Dec. 15—Construction of a four and a half story warehouse to cost \$140,000, has been started by Edward C. Wilson. The building will probably be occupied by the Goodyear Tire & Rubber Co., as its local headquarters.

NEW YORK MERCHANTS ENDORSE FREE PORT

Letters to Congress Explain Why Association Approves Idea for Trading Zones

NEW YORK, Dec. 15—The Merchants' Association of New York has given its official approval to the establishment in the United States of free ports, modeled after the plan in effect in Copenhagen, Bremen, Hamburg and other European cities. In communications to Chairman Fordney of the Ways and Means committee of the House, and Chairman Jones, of the Commerce Committee of the Senate, it expresses itself as convinced free ports would extend American business without detriment to any manufacturer or merchant.

In its communication it sets forth its reasons for favoring free ports or foreign zones, in the following language:

"The legislation asked for is merely permissive; it mentions no particular port at which foreign trading zones are to be inaugurated.

"The Federal Government is not asked to finance to construction or operation of the ports in question;

"Such zones will aid overseas business;

"They do not affect the tariff system or the revenue of the United States;

"They do not discriminate against merchants or manufacturers located at a distance because the facilities are open to all."

"Based upon studies made of the operation free ports in Europe the Merchants Association of New York has been unequivocally in favor of the establishment of such zones in the port of the United States, because it is believed foreign trading zones would be of benefit to our 6,000 members. In this connection it may be noted that the membership of the Merchants Association includes not only importers but exporters, manufacturers, steamship operators, agents, etc., and, in fact, leading representatives of every class of business conducted in the metropolis. All of these classes are on record in our files as approving foreign zones and urging the Merchants Association to lend its earnest support to general legislation providing for such zones."

Of the value of free ports in the distribution of the world's merchandise the report says:

"The international movement of the imported raw materials of the world prior to the war was along well established routes, which have developed as a result of years of trade effort and trade expansion. These trade routes seldom centered in the United States, but usually in Europe. The native products and staple raw materials of the Orient, the near East, South America, Africa and other sections of the world were brought to the ports of that country for temporary storage, sorting, trans-shipment and distribution to consumers and to manufacturers everywhere using them in their products. This is particularly true of

such commodities as rice, rubber, wool, mahogany, oils, miscellaneous oriental product and many others.

"It is inevitable that the distribution of manufactured products, that is, the articles which move from manufacturing countries back to the countries producing raw materials, tends to follow the same routes. Often, in fact, manufacturers are sent in direct payment for raw materials so that the importance of bringing this trade direct to the United States has a double value.

Referring to the handicaps of the present bonded warehouse system, the communication says:

"Now is the time to make the change. European countries realizing that this is the moment of seizing the trade of the world, turned from its former channels by the war, are rushing to follow the example of the older successful trading ports. Spain, Italy, Sweden, Norway, Portugal and other countries have opened, or are about to open, their trading zones before it is too late. With each maritime country of the world striving for an adequate merchant marine and properly equipped docking facilities; with Great Britain and her colonies planning colonial preferential tariffs, with eager merchants everywhere to tie up the future international trade in staples, and with the sturdy American determination to keep the wages of American labor on a high level, irrespective of the nations with which we must compete abroad, the Merchants Association of New York believes that it is extremely desirable that the facilities of foreign trading zones be granted to our traders promptly. Certainly this will enhance the service which the Panama Canal affords in connection with our trade."

WAREHOUSE IMPORTS ADVANCE \$23,000,000

WASHINGTON, Dec. 19—The total import value of imported merchandise remaining in the country's bonded custom warehouses on October 31, according to a statement now issued by the Department of Commerce, was \$125,673,739. This compares with the total import value of \$102,285,147 on October 31, 1918. Of the merchandise classed "free of duty," the value was \$6,180,605, the rest being dutiable, as of October 31, last; as compared with \$9,282,517 in the "free of duty" class on October 31, 1918. The 1919 figures are those corrected to November 28, but subject to revision.

The Department's figures, prepared under the supervision of Philip B. Kennedy, of the Bureau of Foreign and Domestic Commerce, lead to several interesting analyses, perhaps the most timely of these being one relating to the prohibition situation. The volume of distilled spirits fell off from 646,498 pf. gallons to 185,646 pf. gallons, representing a drop in total import value from \$1,759,375 to \$26,430. Undistilled spirits, wines and malt liquors decreased in import value from \$3,402,071 to \$698,369.

PROVES VALUE OF HANDLING CHARGES

Howell Plan of Separating Rates Operates with Benefit to Toronto Warehousemen

TORONTO, Dec. 3—Application of handling charges in addition to storage rates, as now practiced by storage and warehousemen of Toronto, has proven of immense value since adoption of the idea in August last. The former flat rate of charge was abandoned by leading warehousemen after a year of agitation led by the Howell Warehouses, Ltd.

As handling charges were an entirely new cost to Toronto merchants and shippers, a moderate rate, ranging between 30 cents and \$1 a ton, was put into effect. The 30 cent rate covers only flour, sugar and a few other items so that the charge averages 40 cents a ton on all merchandise. On small lots a minimum handling charge of 50 cents is fixed.

Bookkeeping records of the handling charge are kept entirely separate from storage records, though these are billed together to the merchant in the first month. At no time is the handling charge to be added to the package. A schedule of extra charges has been also put into effect, which provides for all work performed in addition to handling and storage.

Fixes Rates for Moving

SYRACUSE, N. Y., Dec. 15—Uniform rates covering charges for warehousing and moving furniture, as adopted by the Syracuse Furniture and Forwarding Co., this city, on Nov. 15, have proven successful in meeting the increased labor costs and keeping them to a minimum. Charges are made in eight classifications.

In the warehouse classification, furniture is charged for at the rate of \$4 a month per van load and pianos are \$1 a month each. Special rates are set for separate warehouse compartments. Long distance moving is charged for at the rate of \$1.25 a mile, plus 3 percent war tax. Special charges are appended for piano moving, flights of stairs, number of helpers, etc.

For suburban and city moving \$3.50 an hour is fixed for the service of van and driver. Helpers are charged for at 75 cents an hour. Patrons are notified they can keep down expense of moving by making as few packages as possible of their household effects.

Plan Cotton Storage

RALEIGH, N. C., Dec. 12—Wake county is being canvassed for subscriptions with which it is proposed to build the Wake County Cotton Warehouse, the charter for which is soon to be secured. The location of the main plant will be determined when plans are matured, and the plan to establish branch warehouses will also be acted upon then.

\$2,000,000 WAREHOUSE PLANNED IN BOSTON

**Cambridge Terminal Co. Announces
It Will Construct Plant with
1,080,000 Square Feet**

BOSTON, Dec. 15—Plans have been completed for a warehouse just across the river in Cambridge that will be one of the largest in the country and when finished will represent a cost of \$2,500,000. A company has been organized by Owen F. Farley to be known as the Cambridge Terminal Company. This company has purchased the entire land and buildings bounded by North and Third streets, Boston & Maine Railroad and Miller's River. It comprises 182,600 sq. ft. of land, part of which was formerly the plant of the Revere Sugar Refining Co.

On this site will be erected a nine-story manufacturing and storage buildings which will cover the entire land. The floor area, 1,080,000 square feet, will be divided into units and rented to suit tenants. Every modern convenience is to be installed, such as sprinkler system, tractor engines, conveyors, power plant, etc.

The buildings will be arranged on each side of a central avenue fifty feet wide, on which all of the sections will abut, giving ample facility for shipping by trucks. Double lines of railroad tracks connecting with the spur, and thence to the main line of the Boston & Maine, will enter the first story of each building in such manner as to be on the opposite sides of the building from the tracks and avenue, so that the incoming freight will enter each building on one side and pass out to be reshipped by trucks on the other.

Each section is to be equipped with stairways, elevator service, etc., so as to be a complete unit in itself, except that the heating and lighting will be entirely from a central plant. The avenue is reached from North street, being marked on the street line by broad archway and the building each way of this archway being carried up into towers of as monu-

mental a character as is consistent with the purpose of this development.

The corners of all the buildings are accentuated by the architectural treatment, so that while the structure as a whole is strictly practical and utilitarian in its character and is designed first and all for efficiency, economy of space, ease of distribution and rapidity of construction, it has been, nevertheless, possible to treat it with a degree of architectural finish which would make an imposing pile, while not in the slightest degree interfering with the intensely practical purpose of the group.

The buildings are planned with a uniform spacing on the centers of columns in each direction of twenty feet, with flat slab construction for floors so that the ceilings will be unbroken throughout. The construction will be thoroughly fireproof in every respect, of steel and reinforced concrete frame with large steel sash in the bays between the exterior columns.

What Did You Think of the January Issue?

L. T. Crutcher, president of the Kansas City Warehousemen's Association, writes to DISTRIBUTION & WAREHOUSING regarding the annual meeting of his association:

"During the course of the evening I called attention of the members to the wonderful October issue of your magazine and urged that they subscribe if they had any desire to keep up with the events in the warehouse business."

Plan Atlanta Warehouse

ATLANTA, Ga., Dec. 5—Atlanta is to have a cotton warehouse with a capacity for 100,000 bales by the time the 1920 crop is harvested, if the plans of Rufus L. Wilson, president of the Union Warehouse Organization Co., materialize. Wilson is also secretary of the National Association of Cotton Manufacturers of Boston. An option has been taken on 46 acres of the S. B. Thurman property.

LOS ANGELES FIXES RATES FOR COTTON

**Compressing, Handling and Storing
Charges by Warehousemen
Governed by City**

LOS ANGELES, Dec. 12—An ordinance fixing the rates or charges for the compressing, handling and storage of cotton at the compresses and warehouses owned by the City of Los Angeles has been passed by the mayor and council, following the issuance of an order drawing up the rates by the Board of Harbor Commissioners.

The charges are as follows:

Compressing—including handling from car, truck or storage, compressing and handling into storage, or onto wharf, car or truck—per bale, \$1.00.

Re-compressing—Bad order or damaged bales, including handling both ways—per bale, \$1.00.

Missing or extra ties—per tie, .15.

Tagging—Applying tags furnished by owner and removing old tags—per bale, .03.

Marking—Furnishing ink, including oblitterating old marks and branding—per bale, .05.

Sampling—per bale, .05.

Sampling—on both sides—per bale, .10.

Weighing—Furnishing weight sheets—per bale, .12.

Re-weighing or supervising weighing—to certificate cotton, furnishing weight sheets—per bale, .12.

Inspection—per bale, .04.

Rejection—including re-sampling, if desired—per bale, .25.

Patches applied—when furnished by owner—per patch, .05.

Sewing on marking patches—Furnished by owner—per patch, .10.

Sewing heads—Furnishing twine—per bale, .05.

Osnaburg strips—Furnished by shipper, applying at time of compression—per bale, .05.

Sewing Osnaburg strips on compressed cotton, small size, per bale, .08; large size, per bale, .10.

Cutting off spiders—including turning of bales—per bale, .25.

Removing bands—per bale, .10.

Re-arranging cotton—per bale, .10.

Skidding for drying—including use of yard—per bale, .10.

Turning over—per bale, .03.

Picking damaged cotton—per pound, .03.

Ordered out and back—for sampling, inspecting, weighing, etc.—per bale, .20.

Ordered out for delivery—per bale, .10.

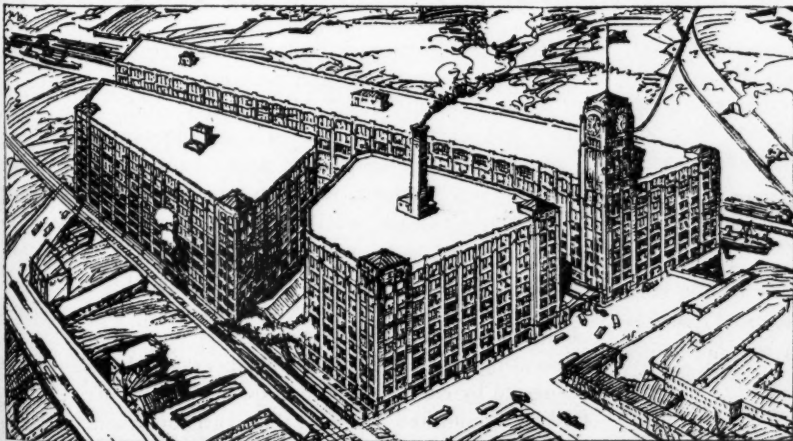
Handling—from storage to car, truck or wharf—per bale, .25.

Delivering cotton—per bale, .10.

Storage—flat cotton in warehouse for each month or part thereof—per bale, .15.

Storage—ordinary or standard compressed cotton in warehouse for each month or part thereof—per bale, .12.

Storage—high density compressed cotton in warehouse for each month or part thereof—per bale, .10.



Sketch of warehouse to be erected in Cambridge, Mass.

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(Continued from page 40)

every way, and he urged members in all other communities to do likewise.

A committee escorted Mr. Keenan, the new president, to the chair. Mr. Keenan said he bore the honor modestly and that the members were to be congratulated on their selection.

Mr. Lovejoy in retiring as president paid a tribute to the loyalty of the members to himself and pledged his co-operation to Mr. Keenan and bespoke the co-operation of the members.

The Keenan Policy

"I'll give them plenty of work to do," remarked Mr. Keenan, "and my job will be to see that they do it."

A resolution offered by Mr. Spear was adopted in appreciation of the work which Mr. Lovejoy had accomplished while for six years president. "Mr. Lovejoy has done work of extreme value," Mr. Spear said, "and he leaves at a time when the culmination of this work is about to come." Speakers representing San Francisco, Pittsburgh, Canada, New York, Kansas City, Minnesota, St. Louis, Texas and New Orleans talked appreciatively of what Mr. Lovejoy had accomplished, and the retiring executive replied simply: "I cannot express what my heart feels." Under a resolution adopted at the suggestion of Mr. Haslett the gavel which Mr. Lovejoy used during his term in office was presented to the retiring president.

Mr. Lovejoy expressed appreciation that the furniture warehousemen had not decided to withdraw. "This was

the only dissension that has come up," he said. "This action leaves Mr. Keenan free to handle the situation."

The question of railroad warehouses was brought up. It was charged by New Orleans speakers that discrimination was being shown by railroad officials against merchandise stored in public warehouses, in favor of railroad warehouses, in the matter of port rates. The rules and the laws were all in favor of the public warehousemen, it was declared, but the railroads did not enforce them and the public warehouseman suffered accordingly. Speakers thought the Railroad Administration and the Interstate Commerce Commission should act and rule to enforce the present regulations. Mr. Haslett, speaking for San Francisco, said no discrimination against public warehouses at that port was being shown by railroad officials.

An invitation from the Convention League of San Francisco was presented by Mr. Haslett asking that the 1920 convention be held in that city. Poppies, which the guests at the convention banquet wore, were propaganda gifts from the San Francisco League in this connection. Mr. Haslett's invitation was supplemented by a telegram from Mayor Rolph of San Francisco.

Mr. Criss read invitations received from the Los Angeles Business Men's League, the Little Rock Chamber of Commerce, the mayor of Springfield, Mass., and the Chicago Association of Commerce. Through speakers at the convention invitations were presented on behalf of New Orleans, which promised "57,000,000 varieties of sunshine;" St. Louis, St. Joseph, Mo., Atlanta, and several other cities. This is something for the executive committee to decide.

Cost Accounting Is Chief Topic Before Merchandise Division

IN opening the program of the general merchandise subdivision, D. H. Van Name, the chairman, discussed the Massachusetts cost handling system and gave credit for its development to W. B. Mason, of Providence, and John Nichols, S. G. Spear, and Mr. Lovejoy, all of Boston.

H. E. S. Wilson, chairman of the committee on membership, reported acceptance of forty-five new members to this division during the past year.

A. H. Greeley, in his report as chairman of the committee on uniform forms and practices, reported the committee had conferred with other industries, like the United States Steel Corporation and the Standard Oil Company, come convinced that the warehouse industry's conditions which had given thought to standardization and had be-

present even greater difficulties than those which confronted those companies and the railroads.

"It is generally true," Mr. Greeley said, "that most forms and practices suitable for a warehouseman handling a few cars a day would not apply to a warehouseman more actively engaged, whose business runs into greater proportions—neither would a form or practice used in one locality be suitable for conditions to be met in another. Again—many of our members must make a specialty of handling certain commodities, which in itself alters the method of doing business."

Pointing out that in many instances warehousemen are requested by customers to use special forms, Mr. Greeley said the committee "believes that warehousemen generally do not look with favor upon, nor would a general plan to

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standardize receive the joint co-operation of the members of this Association."

Regarding negotiable receipts, the chairman said the committee was unanimous in recommending standardization, "knowing fully the desire of warehousemen generally to place the negotiable instrument before the financial world in its strongest light;" and that the standardization be effected not alone in wording but in size and even in color—the negotiable 6½ inches wide and 8 inches long printed on blue paper and the non-negotiable the same size but on white paper.

The committee thought that if the A. W. A. members followed carefully the rules promulgated by the committee on standardization of basis for rates, "as near an ideal situation for uniform forms and practices will be worked out as will ever be possible to do."

Mr. Nichols moved that the merchandise sub-division adopt the recommendation of the standardization committee with the Pittsburgh central bureau. He urged appointment of a committee as large as ten in order to cover territory as broad as possible, believing better results would be produced than if a smaller committee operated. "We want to get everybody's ideas and then thrash them out," he said.

Mr. Greeley urged against any misuse by members of

negotiable receipts, as such misuse would reflect on the A. W. A. as a whole. Discussing the cost handling system he declared warehousemen want pay for every service performed. "Labor costs enter as never before," he declared. "We must conserve on labor."

At the request of Mr. Spencer, Mr. Lovejoy outlined briefly the work of the Pittsburgh bureau.

Ensuing discussion related to the co-operation with the traffic managers, a subject which is dealt with elsewhere on these pages.

Warehouseman's Liability

James G. Perkins, Albany, N. Y., brought up the question of insurance, at the general meeting on the final day, discussing particularly the warehouseman's liability as insurer during the forty-eight hours when he is a common carrier. Discussion brought out that while a warehouseman is not obliged to protect a customer it was regarded as being good policy to do so, in the opinion of some speakers; on the other hand, several speakers thought the warehouseman made a mistake to accept such liability—that the customer himself should underwrite the policy protecting his own goods. Opinion was expressed that as a service to customer the warehouseman should carry insurance but should not admit liability unless it could be shown that the warehousemen showed gross negligence.

Cold Storage Men Attack Proposed Law to Regulate Industry

IN conjunction with the meeting of the cold storage sub-division, on the second day of the convention, cold storage members of the American Association of Refrigeration assembled, the purpose being, as pointed out by the sub-division's executive committee, of which F. M. Shoemaker is chairman, "to discuss and formulate ways and means of attacking the problems which now present for formidable and menacing an appearance."

The committee called attention to the Hutchinson bill (H. R. 9521), declaring it contained "very undesirable and harmful provisions," and bespoke co-operation by the members, particularly through the Pittsburgh bureau.

The Hutchinson bill was taken up by the legislative committee, R. H. Switzler, chairman, in its report. Mr. Switzler opened his talk with a review of Federal and State cold storage legislation since 1911. He pointed out that in every case of conflict of authority between the

United States Food Administration and State regulations during the war the courts held that the Administration's rules governed. "I am not overstating the case," he said, "in saying that the industry itself and the patrons it served received a distinct benefit therefrom." He continued:

Juul Amendment Obnoxious

"We learned the benefits of fair regulation, which were received at the hands of the Food Administration, and I believe that if a referendum vote had been taken among cold storage warehousemen as to the permanent continuance of regulation of the industry by the Food Administration it would have been carried by a practically unanimous vote."

Mr. Switzler told the genesis and progress of the Hutchinson bill and how Representative Juul's amendment, con-

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sidered by cold storage interests to be obnoxious because of its adverse effect on the poultry industry, was tacked onto the bill. This amendment, as Mr. Switzler emphasized, drew many protests from cold storage and poultry interests throughout the country.

The resolutions, recommending specific alterations in the Hutchinson bill, as adopted by the National Poultry, Butter and Egg Association at Cleveland last October were read by Mr. Switzler, together with a copy of the Hutchinson act and the Juul amendment. "I believe the resolutions represent the joint views of the warehousemen and the trade," he said.

Chief Objection to Cold Storage Act

The principal change mentioned in the Cleveland resolutions were set forth in the November issue of *DISTRIBUTION & WAREHOUSING*. The section which earned chief objection was No. 12, elimination of which was demanded on the ground that it was "contrary to the knowledge, experience and investigation of practical and scientific experts on the subject" and that if enacted "would destroy the poultry industry, react seriously upon the producer and deprive the consumer of much wholesome food."

Mr. Switzler said he had been advised that a very general request among poultry shippers and cold storage men had been made to the Senate committee to hold further hearings—the House has already passed the Hutchinson bill—but that "apparently no decision has been reached by the Senate on this point." Mr. Switzler continued:

"It is the belief of the men who have been handling Federal cold storage legislation in behalf of the industry that we should pursue the matter vigorously and make every proper effort to secure the defeat of the Juul poultry amendment; and with the elimination of this item and with such minor changes as it is possible to secure in co-operation with the congressmen who have been handling the matter, give our approval to the bill as a whole in the belief that it is wise to support a measure satisfactory in vital particulars and look to the future to improvement as to details.

To Protest to Congress

"There is little doubt but that the matter will be taken up vigorously in Congress in the near future in view of the President's message of December 2, wherein he renewed his previous recommendations on the subject."

After reviewing President Wilson's views, Mr. Switzler concluded:

"The president's idea, which he repeats in this message, of having the price at which goods go into storage marked on the package, has been opposed by all interested, and received little endorsement in Congress, and I believe I am correct in saying that no bill introduced, even the most

radical, contained such a provision. It is not, however, beyond the realms of probability for some Senator or Congressman to offer an amendment containing such a provision, and recent experience indicates that preparation should be made for such a contingency.

The Hoarding Clause

"The president, in his message, also strongly urges the extension of the present Food Control Act, as to the period of time in which it shall remain in operation. It will be recalled that this is the act which contains the "hoarding clause," under which trouble was made for so many cold storage patrons during the past summer through a misapprehension of the facts by the Attorney General's office. The chances are that the President's recommendation will be followed and the Food Control Act extended for possibly six months after the declaration of peace, and the hoarding clause under which we are now operating will continue in effect for that period. Even, therefore, if no cold storage law is enacted, we now have, and probably will continue to have for some time, the extent of Federal regulation provided in the Food Control Act, which as interpreted by the U. S. Food Administration provides a 12 months' limit on all food products, and denies the use of cold storage facilities to all persons except those who are regularly engaged in the business of handling food products and those who wish to store for their own consumption, and in quantities to meet their reasonable requirements."

Separate Charges

George H. Stoddard, chairman of the committee on standards, was not present but sent a report in which he urged the members to adopt the general storage custom of making a separate charge for labor, or handling, and that they keep this charge separate from storage "both in the billing and accounting and do not bury it in the charge for storage for the first month." In no other way, he said, could the members "get a fair return for the cost of this work or justify such charges as are made for it." He characterized the present method of charging for handling as "absurd."

Mr. A. V. Mason, chairman of the committee on membership, in his report said the cold storage division had increased its membership by six, making a total of fifty-three.

The subject as to the proper basis for computing handling charges was presented by W. B. Mason, of Providence, R. I., who was asked to give the members some conception of the system adopted by the Massachusetts warehousemen. Mr. Mason stated there was no difference in the handling of either dry or cold storage goods, and that the same system could be utilized for both, ex-

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cept, of course, the storage rates would have to be computed on a different basis. He emphasized that it was time the cold storage men adopted some system whereby they would have some basis of computing rates and thus know what it cost them to handle goods.

The Providence System

Some idea of handling costs was given the members when Mr. Mason told of the system he had adopted at his plant. He said he has had an international time clock installed and that each of the foremen carries a clock. When a man or a gang of men is started handling a lot of goods, the foreman punches the time the men begin and the lot number also. When the work of handling that particular lot has been completed the men hand the cards to the foreman who in turn punches the time that the work has been completed. The keeping of the time records for handling each lot is followed up by checking all operations. After the work has been finished the men are checked out, and in on another lot. By this system the warehouse always has a complete record of the men who worked on every lot, the time it took to do the work and also the actual costs. This method of computing costs operates for both dry and cold storage goods, Mr. Mason asserted, adding that since May, 1919, when the time clock system was adopted at his plant, the handling costs had been reduced between 2 and 3 cents per 100 pounds.

Mr. Mason presented figures on the handling of various commodities at his plant—butter in and out by teams, 14.71 cents per 100 pounds, 17.31 cents by car, and 15.24 cents in by car and out by team; eggs handled by team in and out, 11.80 cents per 100 pounds, 17.86 cents by car and 15.24 cents in by car and out by team. It was also brought out by Mr. Mason that his overhead in regard to the handling of goods varied according to the season. The substance of his talk was that the cold storage charges were too high and that the handling charges were too low, so that the storage departments was covering the losses of the handling.

Refrigerator Cars

It was at this point that the members adopted the resolution to the effect that ten members be appointed to work with the Pittsburgh bureau to compute a basis for storage and handling rates.

Dr. Mary E. Pennington, State and National Investigations, American Association of Refrigeration, discussed transportation and the need of additional refrigerator cars. This was of vital interest not only to the cold storage industry, she declared, but was of national importance as virtually every shipper utilizing such equipment was affected. Dr. Pennington said she had visited a large number of plants where such cars are manufactured, in

addition to making a general investigation, and that at the present time the country was badly in need of at least 15,000 cars to replace those worn out during the past five years. If there was a shortage of cars now with the railroad pooling their equipment, what could the public expect, she asked, when the railroads are turned back to private ownership? Dr. Pennington urged that the business man assist the railroads and producers to solve the problem.

This subject, it was announced, would be referred to the new executive committee to appoint a committee or to take other action relating to the shortage of refrigerator cars.

Lack of Cold Storage Space

Mr. Fred. Ophuls of Ophuls, Hull & McCreery, Inc., New York, consulting engineers on mechanical electrical refrigeration and ice making plants, told the members there was hardly a cold storage plant in the United States that was not operating at its maximum capacity and many of these had been forced to turn away business due to the lack of space. He compared the electrically-driven plants with the old steam-driven type, both in operating cost and space utilized. He declared that a large number of cold storage plants still in operation were poorly designed and that their cost of operation was entirely out of proportion to income as compared with other industries, and as a result their charges for space have been high and the earnings on the investment not as large as they should be. He stated also that a properly designed plant could be constructed at a reasonable cost and, by having the proper design of equipment, the cost of operation would be greatly decreased, thus enabling the owner to furnish satisfactory service within the reach of all and still make substantial returns on the investment. Going further into detail, he stated that his company had remodeled plants and decreased the operating cost in some instances as much as 50 per cent at a comparatively small investment. He alluded to a number of plants where he had changed the equipment from the old steam-driven type to electrical and said that every one of these has been able to charge off large amounts yearly thereby covering the additional investment in a short period.

P. E. Kline, cashier of the First National Bank of Cincinnati, discussed the attitude of a banker in relation to the warehouse receipt.

"The Effect of the War Upon the Cold Storage Industry" was the title of a paper presented by Mr. I. C. Franklin, Specialist in Storage, Bureau of Markets, United States Department of Agriculture. This will be published in detail, together with charts prepared by the Government, in the February issue of *DISTRIBUTION & WAREHOUSING*.

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COST ACCOUNT PLAN RECOMMENDED FOR THE HOUSEHOLD GOODS MEN

THE session of the household goods sub-division opened December 11 with the report of W. Lee Cotter, Mansfield, Ohio, as chairman. Mr. Cotter spoke optimistically of the situation to-day in the fact of after-war conditions and labor strikes, and declared there seemed to be closer relationship between warehousemen and employes than in some other line of business. He urged the furniture warehousemen not to relax from giving customers a high degree of efficiency.

"Throughout the year," he added, "the selling price of storage space has not materially increased, although it is true that some rates are being raised at this time. However, we can safely say that our rates have increased less than the rent of apartment houses, other dwellings, or office buildings, and in very few instances have rates been raised on goods which have been in storage for some time. Therefore it cannot be said that we as an industry have in any measure been profiteering.

"Education in Fractions"

"Building costs have mounted by leaps and bounds, and, if we are to take care of the natural increase in business by constructing new warehouses, our rates will need to be increased. Warehouses now operating on a cost as low as two-tenths of a cent per cubic foot per month of available storage space find that they could not replace this space for several times this cost. They also find that if they had their warehouses empty they could readily rent the same without overhead expense at a slightly lower rate than they are now charging for storage service.

"From the reports received on the cost of warehouse space, it appears that some of our members need a little education in fractions. One warehouseman reports that his cost per cubic foot is two cents (2c) and his selling price is one cent (1c). Many others have made unusual statements either in error, or intentionally, not wanting to disclose their true cost. The one outstanding fact is that we do not know our true cost per unit. We know whether or not we are making money, which is determined by our statements of assets and liabilities at the end of the year, but we may be losing in one department and making it up in another, and this, sooner or later, must be corrected.

"The selling price of storage space is generally uniform, ranging from three-fourths ($\frac{3}{4}$) to one cent (1c) per cubic foot, non-fireproof; from one (1) to one and one-half cent ($1\frac{1}{2}$ c) per cubic foot, open fireproof; and from one and one-half ($1\frac{1}{2}$) to two cents (2c) per cubic foot in rooms, fireproof. To make rates fair, modification should be made to these rates. For small lots of goods of special value and many other services that are required, a charge of one-half ($\frac{1}{2}$) months' storage for handling goods into warehouse, and one-half ($\frac{1}{2}$) month's storage for handling out of warehouse has been uniformly adopted. There seems to be a general lack of information as to what it costs the warehouseman to handle goods in and out of the warehouse."

George S. Lovejoy called attention to the reason why the A. W. A. had been divided into three organizations—in order that each section might devote at least one day of each annual meeting to a discussion of its own affairs. He stated that the organization of the A. W. A. as it stands to-day gives unlimited opportunities for any constructive national work that might be undertaken by even an independent organization of household goods warehousemen. He pointed also to the benefits that the household goods sub-division would derive from the work which the A. W. A. had done during the past two years in ascertaining exact costs and devising systems for cost accounting. Plans had been made through the Pittsburgh central bureau, he said, to have the household goods sub-division utilize this bureau to the same extent that the merchandise warehousemen will use it; in this manner it will be possible for the household goods warehousemen to accomplish greater results in less time than could be accomplished through an independent association.

Independence

E. M. Bond of Nashville talked in favor of the organization of an independent national warehouse association but stated that, even should such an organization be formed, he would not withdraw from the A. W. A. He called attention to the fact that he had been attending the various conventions of the household goods associations for several years but in each case had to attend as an associate member whereas under the proposed national

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plan he would be a member with full voting privileges.

After this discussion a motion was made to appoint a committee to draft a resolution that would voice the general sentiment of the members toward the organization of the proposed national association. A. M. Read of Washington, D. C., was appointed chairman of this committee, which later reported that it could see no reason why a new national association composed exclusively of household goods warehousemen would give greater opportunity to the household goods business than could be accomplished through the present sub-division of the A. W. A. This committee recommended that no action should be taken toward either the withdrawal of the household goods men from the A. W. A. or toward an endorsement of the proposed national organization.

William T. Bostwick, chairman of the uniform methods accounting system committee, presented an outline of a suggested warehouse cost accounting system which, the committee hoped, "offered something which would enable the average furniture warehouseman by adapting the sys-

tem to his own conditions, to obtain as nearly as possible a fairly accurate cost of his various departments." The report explained:

"In other words, the committee felt that the subject was so large and so intricate that its first recommendation should be as simple as possible. After investigations we have come to the conclusion that the percentage of warehousemen in this country using any scheme that approaches a real cost account system, is very small. Therefore our first step must be to educate the warehousemen to divide his expenses and income departmentally, and to show himself what departments are showing profits and what departments loss."

The committee conceded it was "inconceivable that we could suggest a cost accounting system which would fit every warehouseman's business without adaptation," as some members did a large cartage business and a small storage business, while others did just the reverse. Accordingly, the committee said, the plan presented was only a suggestion.

Outline of Plan Presented by Uniform Methods Committee

A

1—Divide the business into necessary departments such as
Storage Department
Cartage Department
Packing Labor Department
Packing Material Department
Carpet Cleaning Department
Silver Vault Department and others as may be necessary.

2—Open separate ledger accounts for each department.

3—Credit such ledger accounts for each department, with all income which belongs to such department. This is, of course, comparatively simple. Care should be taken, however, in packing and shipping work to credit the correct amount for cartage, to the cartage department. This includes delivery of materials, etc.

4—Charge directly to each department, all expenses or portion of such expenses which may logically allocate themselves, such as

Labor
Material's
Maintenance of machinery or trucks
Depreciation of same
Wagon repairs
Commissions
Heat, power and water where directly chargeable

Damage on goods, where possible, otherwise to overhead.

In other words, any expenses which definitely belong to any one department should be charged to such department.

(Note: In the case of labor, where this cannot be easily separated, the suggestion is made that it be charged to Building Income and Expenses. (See paragraph 6).)

5—(a) Obtain the gross square feet of space of your building.

(b) Obtain the gross square feet space occupied by each department, and divide into the gross square feet of building, thereby ascertaining the percentage of the building occupied by each department.

(Note: Do not omit to include any space for Packing and Shipping Department which may be set aside for the storing of material, etc., even if such space is not actually in use at the time of making the calculations. In making cartage space, include all that is occupied or maintained for the maintenance or upkeep of any and all vehicles in use by the Cartage Department. As a result of this, you will have ascertained how much of your building each department utilizes. Office space should be charged to Overhead Expense.

6—OPEN A BUILDING INCOME AND EXPENSE ACCOUNT. To this account must be charged all expenses in connection with the owning or maintenance of your building such as

Rent (if building rented).
Interest on mortgage.
If building owned (interest on equity at 6 per cent).
Repairs to building.

Heat (where not directly chargeable to a department).

Light.

Water (where not directly chargeable to a department).

Elevator maintenance (may possibly be directly charged to storage department).

Taxes on building.

Power (excluding, of course, any charging expense for electric vehicles which can be charged directly to a department, or the cost of running any motor or machinery which is used exclusively for any one department and therefore can easily be charged to such department).

Depreciation on building and any other building expense.

The total debits each month on this account are to be offset by a corresponding credit, which is to be charged to each department on a percentage basis of space occupied by each department, as shown in Paragraph 5.

(Note: It is suggested that in the case of storage vaults, in order to take care of the extra cost of installation, that an interest charge be added to the rental charge, such interest charge to be based on the amount of the additional investment.)

7—We have now reached through Paragraphs 2 and 3 the complete income for each department. Through Paragraphs 4 and 6 we have reached the actual expense of each department as definitely borne by such department. The difference between these two figures

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will represent the gross profit of each department.

B

We have remaining all those expenses which it has not been possible to definitely state belong to any one single department. These will consist of such items as:

Office salaries (if for any department they can be charged).

Executive salaries.

Postage.

Association dues.

Telephone and telegraph.

Carfare (carfare may be charged directly to the departments in many cases).

Estimating expenses.

Advertising.

Corporation taxes.

Income taxes.

Insurance.

Office supplies and all other expenses not directly chargeable to any one department. These expenses form what is commonly termed overhead. One of the most difficult angles of this whole matter was the question of dividing overhead. General discussion with experts by various members of our committee have afforded no definite ideas. In our business there is nothing concrete on which we can base such a division. Conditions vary in every warehouse, and the following scheme which was proposed by one of the members of our committee is simply and solely a suggestion and cannot and must not be used blindly. It will serve, however, as a guide and embodies the best ideas that your committee have been able to formulate. The suggestion is as follows:

Ascertain the percentage of gross

business done in each department; take this percentage in each case and add to it the percentage figures obtained in Paragraph 5, Section B, being the percentage of building occupied by each department. Divide the total by 2 and use the result as a percentage figure to divide Overhead.

EXAMPLE

Total volume of business, \$200,000.

Dept. A, storage. Volume of business \$100,000—50%.

Dept. B, cartage. Volume of business \$60,000—30%.

Dept. C, packing and shipping. Volume of business \$40,000—20%.

Figures as per Section B, Paragraph 5. Space occupied: Dept. A, 70%; Dept. B, 10%; Dept. C, 20%.

Department A would therefore have a grand total of 50; 70 or 120, which divided by 2 would give 60% as its division of Overhead. Department B, in the same way, would have 30; 10 or 40, which divided by 2 would give 20%, as its division of Overhead. Department C would have 20; 20 or 40, which divided by 2 would give 20% as its division of Overhead. If this method is used with discretion, your committee feels it may be of material assistance, although it is by no means infallible. Having now ascertained our division of Overhead, we subtract the Overhead expenses in each department from the gross profits obtained as a result of Section A, and have as a result the net profit of each department.

C

To carry the system further in order to obtain the actual cost per cubic foot for storage space, which is the usual

basis for selling such space, we must find the actual net cubic capacity of our storage department. Great care must be taken in obtaining this figure, to make sure that it is actually net cubic space. Aisles, elevator space, partitions, etc., must all be deducted in order to obtain correct figures. The result will be astonishing. Then by dividing the total cost (which would be regular cost, Section A, Paragraph 4, plus overhead, Section A, Paragraph 1) by the net cubic feet, the cost per cubic foot could be obtained. But we must not stop here. This cost represents a basis on which we can figure a selling price for our storage only if our buildings were full 100 per cent of the time, which is, of course, not the case. It is therefore necessary for us to obtain from experience what the percentage of occupancy really is. This average should be ascertained over a period of years. By percentage of occupancy we mean the figure which will represent the average use to which our net storage space has been put over a period of several years, including both good and bad ones. When this average figure has been reached we can then ascertain the real cost by the following algebraic formula:

Let A = the cost as obtained in Section C, Paragraph 1.

Let B = the percentage of occupancy as obtained above.

Let X = the new cost on which we can safely base the selling price. The formula will then read:

$$A : B = X : 100\%$$

For example—

Let A = 10c.

Let B = 75%, then

$$10c : 75\% = X : 100\%, \text{ or}$$

$$X = 13 \frac{1}{3}.$$

The Committee's Report Includes:

"Numerous questions will undoubtedly occur to the listeners in connection with this outline. One of the most important will probably be the question of what is the fair value of your warehouse? Should this be taken on the basis of the cost of building, or on the cost of duplication under today's prices?

"Numerous other questions, such as the matter of whether cartage should receive any benefit for its value as an advertising medium, and a hundred and one questions will undoubtedly arise. This committee, however, has endeavored to give you a simple bare outline, but after presenting this outline wishes to go further and offer the following suggestion:

"Self-protection has forced numerous other lines of

business to co-operate and seek through national or local co-operation the definite and accurate knowledge as to the cost of doing business. For instance, the plumbers' supplies concerns, through their national organization, have had an accurate survey made of their business by specialists and the result of this survey has been to make everything they do profitable. To be sure, this has increased the cost of the work to the consumer, but it has put the business on a sound basis. This has been true of other lines, such as the ice, the coal, the lumber business, and others. Certainly our furniture line is large enough and of enough prominence and we are threatened sufficiently by state and municipal legislation to warrant a survey being made of it. Those of us in the line who are interested in cost accounting and kindred subjects

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know enough practically of our businesses to co-operate to great advantage with any concern which might tackle the survey from a technical standpoint, but those of us do not know enough technically to properly conduct our own survey.

Survey Recommended

"Our committee therefore strongly recommends the making of such a survey either at the expense of the association or through a small *per capita* tax, as the association may decide.

"In the event that this matter of survey is decided upon our committee wishes to caution against the appointment of any firm of accountants who are not thoroughly equipped in every way to handle such a survey. There is too much humbuggery in cost accounting to allow any chances to be taken in the appointment of such a firm. If this survey is made we then, in our individual businesses, will not deliver crating material to our packing jobs at the expense of our storage department, nor will we do a hundred and one other things for nothing, for which we should receive reimbursement."

"Losing Money"

S. M. Woodson, Kansas City, emphasized the fact that the household goods warehousemen generally are losing money on their handling charges and urged that immediate attention be given to the costs of this phase of their business. He stated that in his opinion the basic principle underlying the system worked out by the merchandise warehousemen of Massachusetts could be applied to their problems by the household goods warehousemen.

C. J. Neal, Cleveland, talked against state control, which he characterized as a burden on the industry, and he suggested that the warehousemen of the country correct the bad conditions which now exist from within the industry rather than to invite state utility control.

Public Control

A. H. Hollander, Chicago, advised the men in the warehouse industry to oppose public utility control in the states which are not yet under this form of government, and reminded the members they not only would have a difficult time in securing remunerative rates in their business but that it would be necessary to obtain permission of state commissions in the construction of new buildings, the negotiation of loans, etc.

N. R. Frost, Minneapolis, told how the warehousemen of his state anticipated this public utility control and co-operated with the lawmakers of Minnesota to draft a law that would be fair both to the public and the warehousemen. He stated that the Minnesota law as it stands today has placed the warehouse business of that state on a higher plane than it has ever been before because they

have secured desirable uniformity in the rates and general procedure of business.

A discussion on storage rates based on the valuation of the goods cared for by the warehousemen was led by Walter C. Reid, New York. He stated that the charge for storage should not be based alone on the amount of space occupied but advised the members to charge also on a basis of the value of the goods and, in all cases where the individual articles were valued above the customary \$50 apiece, to charge, in addition to the regular storage rate, one-tenth of one per cent per month of the valuation above \$50 a package.

John Bekins, Omaha, talked on the possibilities of establishing a standard furniture warehouse based on the result of a survey of warehouses in every locality. He pointed out the fact that such a survey would undoubtedly bring to light many desirable improvements in the construction of the average warehouse but admitted that, after all, the warehouse must be built to fit prescribed local conditions and that there could never be designed a standard warehouse that would be ideal for all localities.

Packing and Shipping

In a report of the committee on economics in the packing and shipping of household goods, Walter C. Reid, New York, stated that nothing had as yet been devised in the methods of shipping household goods more satisfactorily, from the standpoint of reducing damage to the goods, than the lift van method. That this system had not been generally adapted Mr. Reid attributed to the fact that too few warehouse companies had the necessary equipment to handle the lift van and that too few warehousemen had tried to sell this kind of service to their customers.

Mr. Reid spoke also of the collapsible steel shipping case devised recently by the King Shipping Case Company of Syracuse. He cited several tests made in recent months in the shipping of household goods various distances in this new case and reported that these tests had shown that household goods could be shipped great distances in this manner with very little damage. (The King case is to be described in a future issue of *DISTRIBUTION & WAREHOUSING*.)

The discussion of long distance motor truck removals brought out the fact that very little profit in the past had been made because of "unintelligent competition." The members seemed to agree that any rate of less than \$1 per mile would not result in profit to the transfer and storage company.

F. L. Bateman, Chicago, discussed present and future classification of household goods for shipment. He called attention to the consolidated classification and quoted the extracts which relate to the shipment of household goods.

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FURNITURE MEN VOTE TO ORGANIZE INTO A NATIONAL ASSOCIATION

AT the White Sulphur Springs meeting to discuss the organization of a national association of household goods warehousemen the New York, New Jersey, Pennsylvania and Illinois furniture associations were represented by three delegates each, the Baltimore by two and the Indianapolis and Southern by one each. These, with three representatives of the A. W. A.—W. Lee Cotter of Mansfield, Ohio; C. A. Aspinwall of Washington, D. C., and M. R. Matthews of Charleston, W. Va.—made nineteen in all. The meeting was an executive one, and accordingly *DISTRIBUTION & WAREHOUSING* has had to piece together from conversations with some of the men who attended, an account of what took place.

F. L. Bateman, Chicago, was chosen temporary chairman and Walter C. Reid of New York permanent chairman. Ralph Wood and M. H. Kennelly, both of Chicago, were made respectively secretary and treasurer.

Representatives of the A. W. A. talked on behalf of a continuation of that organization's household goods sub-division.

Other speakers emphasized that the purpose of the meeting was to organize a national association of furniture warehousemen and urged that no other course be followed. By-laws were considered and the bulk of the work of organizing will fall on a committee selected, which will report back to the individual associations so that the members of these units may arrange for surrendering their associate memberships in the other sectional, State and city associations. No action taken by the White Sulphur Springs convention, however, is binding upon any of the individual organizations, which one by one must ratify or reject the plans for a national body.

Committee Appointed

It is planned to have those which ratify send delegates to a national assembly at a place and date to be selected by a committee, of which Mr. Reid is the chairman. Meanwhile the associate and active members in the several associations will be circularized regarding the plans, and the unit bodies which approve will be given charter membership in the new national organizations.

For purposes of organizing, three classes of membership were decided upon—owners of warehouses having less than 25,000 cubic feet each, owners whose plants have more than 25,000 and up to 75,000 cubic feet, and owners of warehouses which are larger than 75,000 cubic feet. The respective annual dues were fixed at \$25, \$50 and

\$75. The initiation fee would be \$25, with charter members excepted. The tentative plan is to have an annual meeting each July and then have the members attend also a joint meeting with the A. W. A. each December.

An executive secretary will undertake to organize local furniture warehousemen's associations in all communities for purposes of membership with the new national body. Meanwhile, it was decided, according to delegates, that the present sub-division of the A.W.A. should be continued in existence. Leaders in the movement to organize the furniture men nationally declared at Cincinnati that they did not believe the A.W.A. would lose all told as many as twenty members of the sub-division, at least not until the new national body had been well organized. Even then, they predicted, the majority of the furniture warehousemen would desire to retain their A.W.A. memberships.

Ohio Warehousemen Organize a State Cooperation Body

THE Ohio men present at Cincinnati assembled during the convention and formed a new organization—the Ohio Warehouse and Transportation Association. Members of this body will include not alone warehousemen engaged in merchandise distribution, household goods handling and cold storage, but motor truck and express companies and business interests who move lumber, milk, ice and other commodities in Ohio. By the time the Cincinnati convention adjourned the Ohio organization had enrolled between thirty or forty members.

An office is being opened at Columbus, where a salaried secretary will do the organization work. William E. Hague, secretary and treasurer of the Columbus Terminal Warehouse Company, is president, and at his call a meeting is to be held at the Hotel Chittenden in Columbus on January 20, when officers will be elected, constitution and by-laws adopted and general plans made for development.

At the Cincinnati convention W. L. Smith was named vice-president and Edward Wuichet secretary and treasurer, and the following directors were chosen: A. H. Greeley, Cleveland; Charles S. Turner, Toledo; N. C. Cummins, Canton; W. Lee Cotter, Mansfield; Edward Wuichet, Dayton; W. L. Smith, Cincinnati; and William E. Hague, Columbus.

CINCINNATI CONVENTIONS

American Chain of Warehouses

Studies Cost Accounting as Practiced in Massachusetts System Which Has Already Cost \$30,000 in Maturing Is Explained at Organization's Annual Convention—Good Roads, Insurance, Advertising and Business Expansion Discussed at Cincinnati

THE eighth annual convention of the American Chain of Warehouses, held on December 9, was devoted to topics of particular interest to the members. The warehouse cost handling system effective in Massachusetts merchandise storage plants was explained by Charles S. Lovejoy, of Boston. Frank Rochambeau, of New York, executive secretary, emphasized the importance of good roads as distribution channels in association with warehousing. Rates and insurance were discussed in a report submitted by P. F. Cassidy, of Chicago, the Chain's western representative. The convention discussed a suggestion to increase membership dues and the board of directors will decide; one object of obtaining more money as explained by Alton H. Greeley, of Cleveland, president, would be to finance the expansion of the Chain's operations at this time in New England and New York and later in other territories.

Morning Session.

Mr. Lovejoy explained the plan to have the traffic managers at the A. W. A. convention. "The more I think this over, the more important it becomes, to my mind," Mr. Lovejoy declared. "The traffic man must be talked to and they must talk to us." He spoke of the multiplicity of accounts handled for manufacturers and of how clerks and other employees had to be educated to deal with these. He had had many spirited conversations with traffic managers, he said, and the demands of many traffic executives were so radical that his company had positively refused to accept their ac-

counts, and the situation should be brought to an issue. Mr. Lovejoy urged that the members of the Chain cooperate in dealings with traffic managers, declaring the subject was one of the most important before warehousemen today.

"Most of the storage problems have been settled," Mr. Lovejoy said. "We are making money but we are making it out of the storage end of our business."

Mr. Lovejoy estimated he had saved \$3,000 a year by revising his own rules in relation to his dealings with traffic managers. He told how many manufacturers used to send samplers into his warehouses, and said this practice fell off when he began to charge \$1 an hour, with 50 cents as a minimum charge, when samplers came. Similarly, there was unnecessary clerical work being done in his warehouses because of traffic managers' demands, and this was reduced when he began charging \$1 an hour for these services.

Arbitrary Demand for Reports

The arbitrary demand by a Central Western manufacturing company for certain reports was told of by Mr. Lovejoy. The company wrote in effect: "Your account is here. When you send the reports we want, you'll get your money." Mr. Lovejoy said he replied in effect: "Your goods are in my warehouse. When you send me the money you owe me you'll get your goods." Mr. Lovejoy said the Western company threatened him but that he would not release the goods, and finally the money owed was sent to him.

CINCINNATI CONVENTIONS

The time perhaps was not ripe for establishing uniform practices in all cases, Mr. Lovejoy thought, but at least the traffic managers should be made to understand that there was necessity for working toward uniformity.

Mr. Greeley described the monthly "good fellowship" dinners which are held at his Cleveland warehouses, enabling all officials, from highest down to the freight clerks, to become acquainted and learn one another's viewpoints.

Alluding to the co-operative work being done by the Chain, Mr. Greeley suggested that another man be placed with Mr. Rochambeau in New York to promote the Chain members' distribution activities and opportunities in the New York and New England territories. He believed that some day an office similar to the one in New York would be opened in San Francisco.

Mr. Greeley suggested that there should be higher membership dues charged, in order to finance the expansion of the New York office.

A recommendation was made to the members by Mr. Greeley that they use *DISTRIBUTION & WAREHOUSING* as an advertising medium. He declared the magazine was doing "wonderful work" for the warehouse industry.

The Department of Commerce, Mr. Greeley said, had asked the Chain for a list of the warehouses throughout the country.

The question of increased dues was again taken up, and Mr. Greeley appointed a budget committee to prepare recommendations for consideration by the board of directors, which will have the final say. This committee consisted of Mr. Lovejoy, chairman; D. H. Van Name, New York; S. J. Beaucham, Little Rock; John Bekins, Omaha; Samuel M. Haslett, San Francisco, and William H. Gibson, New York.

Mr. Lovejoy spoke of the Massachusetts system of determining fair warehouse handling rates and urged that all members adopt it. He said \$30,000 had thus far been spent and that engineers are still on the payroll working on scientific rates.

By adopting the system, Mr. Lovejoy said, the members would get back in dividends the money it cost to introduce it.

"We have the foundation and basis to work on," Mr. Lovejoy asserted. "We can educate one another. The days of rate cutting and throat cutting have passed. In another year, further figures will be available in Massachusetts which will surprise you."

Mr. Lovejoy brought with him copies of a book entitled "Tariff Guide No. 1" as adopted by the Quincy Market Cold Storage & Warehouse Company, of which he is manager of the general storage department. This book contains instructions for determining storage and

handling rates and was worked out on the Massachusetts system. In distributing copies of it among the Chain members, Mr. Lovejoy said:

"There's the story. Work it out in your own warehouse. The method of deriving rates is described. An example is given in the book. Public utilities commissions would benefit by having such statistics placed before them by the warehousemen."

It was brought out that the United States Government was considering a plan to operate some of its warehouses at army bases for public purposes, and that in this connection the bonded warehouse at Panama had already inquired into the Massachusetts system.

Mr. Greeley discussed the rate system, declaring the Chain members were fortunate in having present Mr. Lovejoy and his associates to explain the Massachusetts methods. He said it was the duty of every member to gain knowledge of the system, as the question was of the utmost importance.

Afternoon Session

A representative from Mr. Lovejoy's office explained in detail the Massachusetts system.

He said that the basis of classification of goods for storage is the floor space utilized. In the "standard storage classification," which is the basis of the computations, the floor load table is computed on a load not to exceed 250 pounds per square foot of floor space occupied, or 8 1/3 feet high, to earn 6 1/4 cents gross (approximately) per square foot of floor space utilized or 3 1/8 cents gross (approximately) per square foot of total available floor space with an average use of 50 per cent. The available space includes all space inside the walls except elevators, stairways, office and shipping room. Six and one-fourth cents divided by floor load (not more than 250 pounds or 8 1/3 feet high is the standard base rate per 100 pounds.

The summary of advice to the Chain members in connection with the Massachusetts system was "ascertain your own costs—the matter of rates will take care of itself." The Quincy Market's tariff guide, it was explained, was based on investigations which had increased handling rates from 10 to 300 per cent on commodities the handling rates on which had hitherto been brought down through unintelligent competition. Through adopting the Massachusetts system, Boston warehouses were enabled to make increased wages to labor in advance of labor's demands and so avoid strike controversies so common to many industries.

William E. Halm, of the New York Dock Company, discussing labor conditions generally, told how strikes had been avoided at his company's plants through bonus systems, welfare work and other methods. He ex-

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plained how, under a piece work arrangement, labor was handling more goods per man, with non-productive charges being eliminated.

Loss through advancing freight charges as a service to distributors was discussed, and the system put into operation by the Ewert & Richter Express & Storage Company, of Davenport, Ia., was explained by Mr. Richter. A notice sent by this company to customers was read, as follows:

"After much thought how to overcome the constant loss in our freight department, being for service rendered, of advancing the freight charges, interest on thousands of dollars so invested, expense of clerks and collectors, the time lost in astray and bad-order adjustments, and actual cash loss on freight paid out for accommodation, all this service rendered to our customers in the past without a charge we now find is responsible for this deficit.

"To reimburse us and continue to render this efficient service, and that it be properly distributed to all concerned, in proportion to the investment on our part and responsibility and work performed, that effective November 1, 1919, a charge of 1 per cent of the gross freight with a minimum of one cent be added to the amount paid as shown on each railroad express freight bill. While but very small in the aggregate, the sum we hope will be sufficient to allow us to balance this loss."

It was explained by Mr. Richter that this system of charging would add \$2,200 annually to the company's income. Some of the other speakers, agreeing that the charge was a fair one, declared 15 cents was a proper minimum charge.

Benefit of Chain Membership

Discussion of increased membership dues was resumed. S. J. Hansen, of Milwaukee, suggested that, if dues were raised, part of the money be devoted to collective advertising by the Chain members in DISTRIBUTION & WAREHOUSING. This suggestion was referred to the budget committee previously appointed.

The benefits of membership in the Chain were explained by various speakers. It was brought out that there are fifty members who handle twenty carloads of merchandise daily, or a total of 1,000 carloads each day. Figuring 313 working days a year, the total carloads handled by these fifty members is 313,000. There are fifty other members who average three carloads a day, of 150 carloads in all. Figuring 313 working days a year, this is approximately 47,000 carloads annually. Thus it is estimated that throughout the year the members of the Chain handle more than 350,000 carloads of merchandise through their warehouses.

The report submitted by Mr. Rochambeau reads:

"The year just ended was a strange one in many respects. Those who believed we would quickly return to peace, prosperity and low prices when hostilities of war ceased, were disappointed. On the contrary we have on our hands an industrial war that in some respects is more menacing to our institutions, homes and business than was the world war at any period. Our Government itself has been menaced by plotting

anarchists, Bolsheviks and other radical types. However, industrial unrest is passing and the enemies of good government are being driven out. The genius of the American people can be depended upon to maintain law and order. Thus again conforming the old law of mathematics that "The whole is greater than any of its parts." Divide the people into as many unions and radical bodies as you will. Let each body assert itself, as it may be. Not one or all of these can be greater than the nation, whose rights are paramount and will prevail.

Manufacturers' Stocks Oversold

"These disturbing influences together with war activities have destroyed much business. During this period there has been a serious shortage of all manufactured products. Every manufacturer is oversold and months behind in orders.

"Most manufacturers have had great difficulty in securing their raw materials fast enough or in large enough quantities to enable anything like a normal output. A factory manager explained to me the other day that he seldom could get all the necessary materials at hand at one time. For instance, sugar is an important item, but hard to get; however, when a supply of sugar can be had, he cannot secure cans, or labels or packing boxes or bottles or adequate help or necessary printed matter or cars in which to make his shipments. In general he is today just out of luck most of the time. This is the sad story of almost every manufacturer.

"We need more production and less investigation. We must have more food, more clothing, more houses, none of which can be acquired by conversation. We need good, honest labor and lots of it, and less Governmental interference.

"The unfair and stifling effect of the excess profit tax is influencing adversely every class of business. Its results in reducing production would show up enormously if statistics could be obtained. Few concerns are putting forth their best efforts to increase their business and their profits, as their endeavor is shorn of its reward at the tax period. One expedient resorted to is a heretofore unmatched volume of advertising. The bill for which is charged to expense, and this reduces the excess profit tax. The results of this advertising will, in many cases, be beneficial in building up business for the future, but will not help much at present. There is, however, some indication that the business situation has improved slightly in the past few weeks. There seems to be a determined effort on the part of some houses to do something in spite of the unfavorable conditions. The export field is attracting the attention of many concerns. They are devoting their attention to export trade in preference to domestic trade. Foreign markets are more attractive from the standpoint of prices. The export business also has been retarded in the past few months on account of the decline in the price of foreign exchange. Europe has evidently made up its mind to let the exchange go where it will, on the theory, apparently, that as the rate declines, the demand for our goods will also decline.

Greater Use for Highways

"When labor becomes more stabilized and decides to work a full, honest 8-hour day, and other unfavorable conditions disappear, this country will be busier than it ever was, busier than it was in war times, in the effort to provide for current needs and make good the wastage of war. This will require some years to accomplish.

"The question of good roads is one that is of great interest to public warehousemen. Long distance depends on good roads. The more long distance hauling we are able to do, the more merchandise will be stored in public warehouses. When business increases, the railroads will probably become less use for highways. The growing value of the auto truck as a

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freight carrier, in addition to its wide use for passenger service, makes the state of our country roads a matter of prime interest. Shippers know that railroads handle carloads with greater dispatch than less carloads. Therefore, they will ship carload stocks to public warehouses throughout the country and depend on trucks and good roads to distribute the less carload shipments to the surrounding territory. In this connection it is estimated that \$633,000,000 will be spent in the United States during the year 1920 for modern highways. This will require 125,000,000 tons of material, or five times more than what was used for road building in 1919. The largest previous year's total expenditure for like purposes was that of 1916, which was \$136,000,000. The Chief of the United States Department of Public Roads, which is connected with the Department of Agriculture, recently addressed a letter to all State highway officials urging co-operation in highway construction. It seems to me that this is a matter in which our members should take a great interest, assuming that good roads will attract business for public warehouses.

"I do not want to appear too optimistic. However, I cannot help but feel that 1920 will be a good business year, despite the prospect for war with Mexico, a general coal strike, some thousand local strikes, together with politics, prohibition and propaganda which we have with us always."

Total Membership of Ninety-eight

Mr. Rochambeau reported that eight new members had been elected, making a total membership of 98. The newcomers are:

Carnahan Transfer & Storage Co., Alexandria, La.; W. N. Carnahan, proprietor; State Center Warehouse & Cold Storage Co., Fresno, Cal., W. C. Nixon, manager; Warner Warehouse Co., South Bend, Ind., H. A. Pruyne, manager; Union Terminal Warehouse Co., Jacksonville, Fla., H. C. Avery, manager; Duquesne Warehouse Co., Pittsburgh, Robert L. Spencer, superintendent; Sovereign Fireproof Storage Co., Rockford, Ill., C. E. Sovereign, proprietor; Toledo Terminal Warehouse Co., Toledo, Ohio, F. C. Hackett, manager; Tulsa Warehouse Co., Tulsa, Okla., Orra E. Upp, president and manager.

Mr. Cassidy's report follows:

"For the first six months following last year's meeting, conditions covering storage, as we all know, were very unsettled, but I think there is considerable improvement for the last few months, and we are now getting many inquiries, showing that our present patrons figure on extending their storage and distribution accounts in the cities they are now using, as well as adding additional ones. This also applies to concerns that have not been in the habit of carrying stock at outside points.

Look for Increase Business

"This condition is helped a great deal by the distribution of our directories, as well as our own solicitation, and I think this coming year will show that a great many of our Chain houses will be handling additional and new storage accounts covering various commodities.

"I have suggested heretofore the advisability of keeping in close touch with your local commerce associations and clubs, and I am doing this in Chicago as far as possible, and particularly for the reason that such organizations as the Chicago Association of Commerce have been doing quite a lot of advertising and soliciting in behalf of Chicago regarding the increasing of our manufacturing covering different products, as well

as endeavoring to interest shippers from other cities to locate there. The conditions, as I find them at present, seem very healthy indeed, and all our Chicago shippers are very optimistic covering stocks that they figure on carrying in various cities.

"We still have to do considerable explaining regarding the increased rates, particularly covering our handling charges, and I am helped out considerable in this respect through the kindness of our various members in keeping me supplied with copies of tariffs and other publications covering handling, storage and drayage charges; and, by submitting such figures to these shippers, it shows them that we have something on which to base our assertions as to these advanced rates.

"The feature as to knowing weights and dimensions of packages in order to quote rates is also something which is not only beneficial to us but also to many shippers, as I have found recently that quite a few of them do not even know the actual weights or dimensions of their packages, and in one instance the figures as given by the shipper and as determined by the warehouse which handled the goods have shown that the shipper did not have or give the correct figures. In cases of this kind I have been fortunate to, in some instances, arrange with the shipper to forward us a car on a guarantee that we would store and distribute on a reasonable basis and could, after handling the car, quote proper rates, as this would enable us to determine what the weights and measurements were. In instances where certain shippers have many different kinds of packages it is rather difficult to quote them unless we have correct information.

Members Can Assist Each Other

"I can also repeat what I have stated in previous reports as to keeping in close touch with local jobbers, brokers, etc., as I think you will find a great many of them can give considerable assistance to our local warehouses and keep us all informed as to new accounts, such as products that will be handled by bakeries or concerns that will now handle commodities to be manufactured and shipped by the large brewers and similar concerns that have been affected by recent legislation; as many of you know, I have received some such inquiries lately and I am in hopes that something will develop in your favor from same.

"I still have a few concerns that insist on a season rate basis and proposition, but, of course, am trying to discourage same all I possibly can, and I believe that at the A.W.A. Convention at least one representative of such a concern is to be in attendance, and I might also add that he is at the present time figuring with one of our members for the handling of his account.

"I trust that at this meeting any matters pertaining to the Chicago office or houses will be taken up, and I will be very glad to give complete information about such matters, as I am very glad indeed to receive suggestions at all times. This is also one reason why I would prefer to hear oftener from a great many of our houses who do not seem to keep me advised on any local or other matters that might develop.

"I see great improvement on the part of many of our members in keeping me supplied with copies of their replies and correspondence with various shippers in Chicago territory, and wish to say that this is very beneficial and I hope that our other members will inaugurate this same system, because it keeps us all in closer touch with these matters and should result in your favor by having them followed up immediately.

"I wish to thank the members for their prompt attention to requests which I have sent them covering various matters, and also the many things they have done in favor of the Chicago houses and office, and trust you will all have a very prosperous year."

WAREHOUSING NEWS

Contributions Solicited

Gramatan Securities Co. is building a storage warehouse at Bronxville, N. Y., which will be operated when completed as the Gramatan Warehouse. Frank B. Valentine will be manager. It will contain 275 separate rooms which will be devoted to the storage of household goods. In addition the company will conduct a general moving, packing and shipping business.

Charles & Co., New York, have purchased from the Manhattan Storage & Warehouse Co. the warehouse on East Forty-first street, at a price of \$200,000. After alterations the building will be used for the assembly and delivery of orders.

The De Luxe Grass Rug Co., Fond du Lac, Wis., is erecting a fire-proof warehouse which will have capacity for the storage of 1,000 tons of hay.

Louis Randing, has added to his plantation at Lydalville, Conn., a warehouse where he will do his own tobacco packing and also packing for other tobacco growers.

Delcher Brothers Investment Co., Jacksonville, Fla., will add four stories to its present three-story warehouse, at a cost of \$50,000.

Nausett Warehouse Co., Fall River, Mass., is soon to build a large warehouse in that city.

L. Oppenheimer, New York, will erect a large warehouse adjoining his present business on West 130th street.

H. & J. Fajan, of New York, are converting the building at 9 South street into a four-story storage warehouse, and will take immediate possession when alterations are completed.

The American Hominy Co. will erect a warehouse on Union street adjoining the Wabash railroad, at a cost of \$46,000.

D. H. Holmes Co., New Orleans, will have its new five-story warehouse completed by March. With the completion of the new building the location of a number of departments will be changed.

Binghamton Warehouse & Supply Co., Binghamton, N. Y., will soon open a new warehouse, the financing of which was carried out by increasing the capital stock of the company from \$5,000 to \$35,000.

The Emerson-Brantingham Co., Rockford, Ill., will build a warehouse in the spring which will be used as the distributing center for the company's line of farm implements.

The Acme Supply Co., Inc., Newport News, Va., is soon to be build a warehouse here at a cost of \$30,000 for the storage of masons' materials.

The S. F. Bowser Co. is erecting at Albany, N. Y., a warehouse and office building, which will be used as its merchandising center.

The Philadelphia Paper Co., Philadelphia, will soon occupy a new warehouse which is being erected at a cost of \$10,000.

The Northern New York Grocery Co., Malone, N. Y., will occupy a new building about March 1, in which it will continue its commission business.

Fidelity Storage Co., Baltimore, Md., will soon erect a \$135,000 warehouse.

Gaines-Fellers Co., Columbia, S. C., are erecting a warehouse which will be the site of the company's wholesale business.

The Rucker Warehouse Co., Greensboro, N. C., is planning the erection in that city of a cotton warehouse which will have a capacity of 15,000 bales. The

building will cost approximately \$100,000.

The American Radiator Co., of Chicago, will erect a warehouse in Boston which will cost \$1,500,000.

Carter, Rice & Webster, Boston, are planning the erection of a \$450,000 storehouse.

John Pennington, San Francisco, will soon occupy a warehouse which has been built at a cost of \$21,500.

Wheeling Can Co., South Warwood, W. V., is building an addition to its plant which it will use as a warehouse for the storage of cans. The building will cost \$35,000.

Terminal Ware Co., Baltimore, Md., is planning the erection of a new warehouse on Boston street, which will be one of the largest in the water front section of the city.

The Wilcox-Crittendon Co., Middletown, Conn., will soon occupy its new storehouse.

Michelin Tire Co., San Francisco, has applied for a spur track permit from the Ocean Shore main line to Twelfth street, near Howard, where it proposes to erect a warehouse.

Orangeburg Bonded Warehouse Co., Columbia, S. C., has been granted a commission. The capital stock of the company is \$25,000, and it proposes to erect a warehouse for the storage of cotton and personal property. The petitioners are George M. Seigneous, Frank P. Seigneous and Frank C. Bryant.

M. & M. Trucking & Forwarding Co., Jersey City, has been incorporated with a capital stock of \$50,000. The incorporators are James McArdle, James McGirl, Thomas D. Lynch and Cecilia Fitzpatrick.

WAREHOUSE CONSTRUCTION

(Continued from page 27)

of the building to the other. Connecting with the center aisle are four 4 ft. 9 in. cross aisles which extend the length of the plant. One of the features in the layout of the aisle and private rooms is that at the end of each aisle is a large window, thus work can be done on any of the floors between the second and eighth without the use of artificial light.

The plant contains 1200 private rooms ranging from 500 cu. ft. to 1500 cu. ft., or from one to three van loads. Partitions dividing the private room are of Gypsum construction, which is a composition made up of 2 in. wood covered with tin combined with asbestos. To prevent dampness in the rooms, a ventilator constructed of Juitey

block is installed over each of the doors leading to these rooms. This ventilator allows an even circulation of air throughout the rooms at all times.

In the operating of the company's activities, it will handle goods either by the load or on a contract basis. That is, for ordinary household effects. For storage of pianos a charge of \$1.50 a month is made when the instrument is stored in the piano room. It can otherwise be placed in the private room with the household goods for about 75 per cent of this charge. In the handling of household effects the company utilizes twelve vehicles, namely three 3½-ton Atco, two 3½-ton G.M.C., three 2-ton Titan, one 2-ton Federal, one Autocar and also two Walker electrics.

INFORMATION DISTRIBUTING

Others Besides Yourself Like to Read

Distribution applies to a magazine as well as to a commodity.

THERE are many manufacturing companies and warehouse firms which subscribe for a great number of trade publications but have no method of making certain that the magazines are brought directly to the attention of the employees who would be interested in certain articles

This is not true at the plant of the Keystone Steel & Wire Company, of Peoria, Ill. The Keystone executives have in operation a system which enables all employees to have in their hands regularly the articles which are particularly informative for them.

Thirty-two publications, including *DISTRIBUTION & WAREHOUSING*, are subscribed for by the Keystone Steel & Wire Company. When *DISTRIBUTION & WAREHOUSING* reaches the Keystone offices each month it is immediately handed to a clerk who keeps a record of all trade papers. This clerk checks *DISTRIBUTION & WAREHOUSING* as having been properly received. Each publication is similarly checked, so that if one month's issue is not received a memorandum can be sent to the employee who is most interested in that magazine, and a letter is written to the publishers asking for the missing copy.

After the clerk has received *DISTRIBUTION & WAREHOUSING* he attaches a sticker to the outside cover; on this sticker, under the heading "Delivery Order," he inserts numbers from 1 to as many as may be listed, so that they will receive the magazine in numerical order.

Under this system *DISTRIBUTION & WAREHOUSING* goes first to the transfer department, John Simon, who handles warehouse accounts; then to the purchasing and traffic department, E. G. Schaeffer, and on to the shipping department, F. Racine. The transfer department receives it first because that is the department most interested in the publication. When the transfer department has made note of all the articles which appeal especially to it, a mark is placed under the heading "Check Here" and the magazine is placed in the outbound mail basket awaiting the office boy, who makes hourly trips through the departments. This process is continued until all interested have read the magazine, which is then placed in a permanent file. In telling how *DISTRIBUTION & WAREHOUSING* passes through the Keystone plant Mr. Simon says:

"This plan probably would be of little interest to a small concern, but in a large office or warehouse it would prove well worth the effort and time expended, as it often happens that there are articles contained in your publication which are of interest to practically everyone

Please check when through reading and place in basket for delivery to the next department			
Delivery Order	DEPARTMENTS	Check Here	SEE ARTICLE PAGE BELOW—REMARKS
	President—P. W. Sommer.		
	Sec'y and Treas.—B. L. Sommer.		
	V. Pres. and Gen. Supt.—W. H. Sommer.		
	V. Pres. and Gen. Sales Mgr.—H. G. Moore.		
	Asst. to Pres.—C. W. LaPorte.		
	Comptroller—A. J. Snyder.		
	Asst. Treas. and Office Manager—D. P. Sommer.		
	Asst. Genl. Supt. in Charge of Construction—John Sommer.		
	Asst. Genl. Supt. in Charge of Production—A. W. Lyle.		
	Advertising Dept.—O. A. Brock.		
	Sales Dept.—A. A. Nelson.		
	" W. G. Hume.		
	" D. S. Anderson.		
	" H. V. Dimmick.		
#2	Purchasing and Traffic Dept.—E. G. Schaeffer.		
	Purchasing Dept.—E. P. Kastien.		
	Credit Dept.—J. R. Binford.		
	Cost Dept.—A. E. Hammond.		
	Auditor F. J. Schlatter.		
	Asst. Sec'y—G. W. Racine.		
	Electrician—Ralph Koch.		
	Wire Mill Supt.—Jos. L. Herman.		
#5	Fence Dept.—C. Herman.		
	Shipping Dept.—F. Racine.		
	Machine Shop—Joseph Ramseyer.		
	Master Mechanic—P. Sutherland.		
	Galvanizing Dept.—H. Wolgamott.		
	Drawing Dept.—E. J. Hindert.		
	Gate Dept.—J. McCarthy.		
	Power Dept.—J. B. Thompson.		
	Chief Engineer—J. C. Newell.		
#1	Chief Draftsman—C. F. Bailey.		
	Transfer Dept.—J. Simon.		

NOTE—If you see an article that may interest some one in particular, kindly note same in space provided. Do not hold magazine longer than necessary. All magazines will be kept on file in the office for future reference. 477-10-19-500

Chart showing various departments that receive *DISTRIBUTION & WAREHOUSING*.

interested in shipping or storing; therefore, each individual who is interested should have the opportunity of reading and digesting your publication thoroughly.

"We find our system is invaluable as it avoids the possibility of a publication lying on one man's desk when it could be traveling through the plant and doing double duty."

Federal Warehouse Regulations

FOR the information of grain and cotton storage interests, two documents have been issued by the United States Department of Agriculture which are of interest to warehousemen who handle these commodities.

One—the Department's Circular No. 141—sets forth "regulations for grain warehouses" and embraces the new rules as amended under date of July 24, 1919. The other—the Department's Circular No. 143—contains the "revised regulations for cotton warehouses" as amended on July 24 last and approved on September 15. These pamphlets may be had by writing to the Department of Agriculture.



Stewarts pay daily profits on work like yours

Stewarts more than pay for themselves. They are bringing in new business every day for carting firms everywhere, handling old trade and new, steadily and at a profit.

Stewart design eliminates hundreds of really needless parts, making a stronger truck, simpler to operate, more economical in cost of gasoline, oil, tires and repairs, and \$200 to \$300 *less expensive to buy than the average truck.*

The Stewart factory offers to put you in touch with other carting firms who know by experience that Stewarts pay actual profits. If you are interested, write for this information—the best proof you can get.

The owner of the above truck says:

In my exclusive use of the Stewart Motor Trucks in the past two years they have stood up so well that I feel I must write you these few lines that you have a wonderful truck and can highly recommend the Stewart for its wonderful dependable "Service."

(Signed) METRO AUTO DELIVERY.,
By Sam Praver, New York, N. Y.

Stewart Line 5 Sizes:

3/4-ton	\$1195
1-ton	\$1650
1 1/2-ton	\$1975
2-ton	\$2575
3 1/2-ton	\$3500
f.o.b. Buffalo	

Makers of Quality Trucks since 1912

Stewart

MOTOR TRUCKS

Stewart Motor Corporation

Buffalo, N. Y.

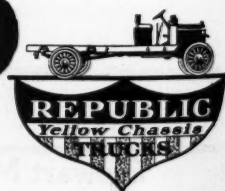
The evidence of Republic value is *undeniable*. No business man needs to go beyond the bare fact that 60,000 Republics are *establishing records everywhere*— for *performance, for ruggedness, for economy*. With more users of its product than of any other make, the Republic Company has become, in six years, the largest manufacturer of motor trucks in the world.

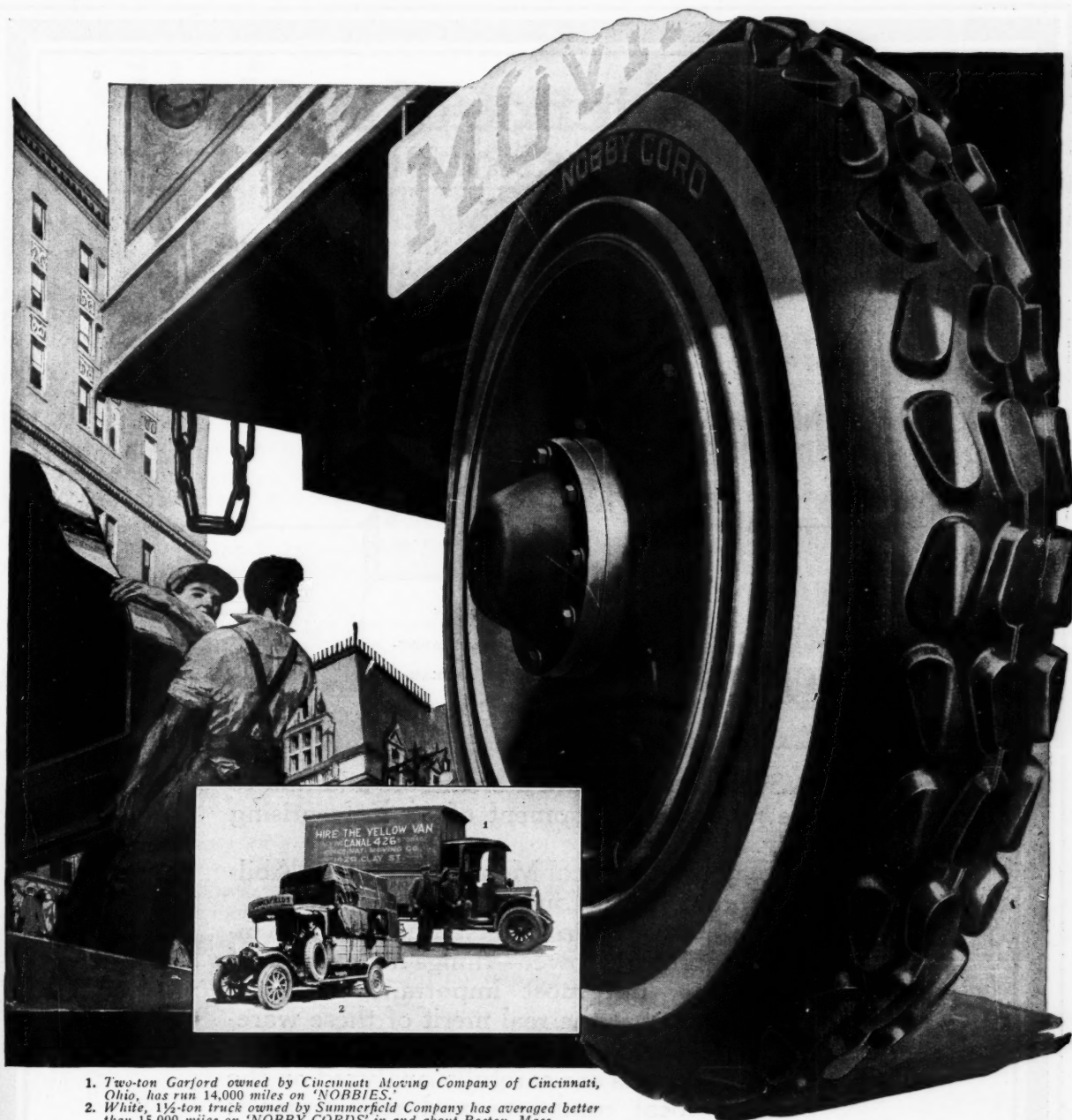


REPUBLIC TRUCKS

Republic Motor Truck Co., Inc., 948 Michigan Avenue, Alma, Michigan
National Truck Shows

New York, 8th Coast Artillery Armory, January 3 to 10
Chicago, International Amphitheatre, January 24 to 31





1. Two-ton Garford owned by Cincinnati Moving Company of Cincinnati, Ohio, has run 14,000 miles on 'NOBBIES'.
2. White, 1½-ton truck owned by Summerfield Company has averaged better than 15,000 miles on 'NOBBY CORDS' in and about Boston, Mass.

NOTHING has done more to increase the popularity of 'NOBBY CORDS' than the downright effectiveness of general hauling.

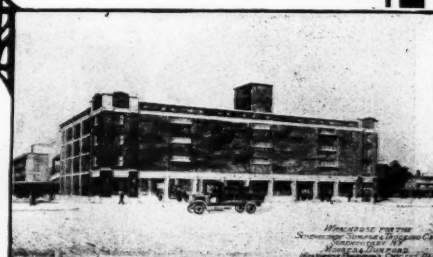
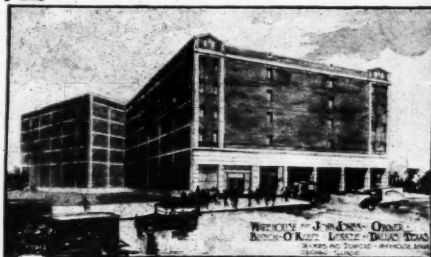
The moving van industry—sold forever on 'NOBBY CORD' cushioning power, plus economy, have forwarded these compliments—"The Cincinnati Moving Company's two-ton Garford is riding on the original air of a year ago. These tires have no less than 14,000 miles to their credit and have reduced our upkeep 30%."

Quoting the Summerfield Company—"NOBBIES' on our 1½ ton White have given us better than 15,000 miles and never off the rim; we recommend 'NOBBIES' to our friends." If your trade is looking for real economy in hauling, inform them that—

**'Nobby Cords' Save in Every
Phase of Truck Operation**



The Science of Building Warehouses



THESE ILLUSTRATIONS
PORTRAY THE
MODERN, SUBSTANTIAL CHARAC-
TER AS WELL AS
PLEASING, ARTISTIC APPEAR-
ANCE OF
MOORES & DUNFORD
WAREHOUSES

Such Buildings are a creditable addition to the modern development of an Enterprising City.

They are Practical Monuments to the Ability, Enterprise and Success of Their Owners.

It is, however, in Utility, Facility, and Increased Earning Power—things not capable of illustration, but most important to Warehousemen—that the real merit of these warehouses exist.

These factors are carefully analyzed on the basis of local conditions and requirements; then the conclusions deduced are presented as facts and figures in a MOORES & DUNFORD REPORT.

You, who contemplate building this year, will do well to get in touch with a firm devoting its attention exclusively to the Science of Warehouse Conception.

MOORES & DUNFORD

746 First National Bank Bldg., Chicago, Ill., U. S. A.

Shippers Index

A Guide to representative Transfer and Storage
Companies arranged by States and Towns

SELLING DISTRIBUTION

THE manufacturing companies which purchase distribution service from the warehousemen are scanning the advertising pages of **DISTRIBUTION & WAREHOUSING** each month because they know that the men who are the live wires in the warehouse industry are telling their story on these pages.

The manufacturer who reads in the Shippers' Index the advertising story of warehousemen in Boston, or San Francisco, or Jacksonville, or Little Rock, or Chicago, is going to be sold in that advertising in preference to arranging for distribution through the other warehouses in those cities but which do not advertise. The manufacturer has no direct medium for knowing what the non-advertiser has to offer.

Below is an illustration of how manufacturers regard **DISTRIBUTION & WAREHOUSING**. The Keystone Company, of Peoria, Ill., is one of the expanding number of distributors on this magazine's subscription list. The Keystone's letter reads:

"December 9, 1919.

"Mr. K. B. Stiles,
"Editor Distribution & Warehousing,
"231-241 W. 39th St.,
"New York City.

"Dear Sirs—

"Congratulations on your very excellent publication "Distribution & Warehousing." To my way of thinking you have 'hit the nail on the head,' and are not only furnishing the Warehousemen but the Distributor as well with a publication that ought to grace the desk of every Warehouse man and every manufacturer who is interested in handling his products through the Warehouse.

"If you do not meet with the whole hearted support of every Warehouse and every distributor it will be a great misfortune for those who do not avail themselves of this opportunity to get in closer touch with the Warehouse men and the Distributor.

"Respectfully yours,

"KEYSTONE STEEL & WIRE COMPANY,
"Manager Transfer Department."
Jno. Simon,

"JS:ES"

Coming Events

Meetings Scheduled by Leading Associations in the Industry

Central Warehousemen's Club.....	Kansas City, Mo.....	January 13
Texas Transfer & Storagemen's Ass'n.....	Houston	January
Massachusetts Storage Warehousemen's Ass'n.....	Boston	January
Port of New York Bureau of Information.....	New York—Annual Meeting.....	January 20
Pacific Coast Furniture Warehousemen's Ass'n.....	San Francisco	February 21
Southern Furniture Warehousemen's Ass'n.....	Jacksonville	February 10
Pa. Furniture Warehousemen & Van Owner's Ass'n.....	Philadelphia	February
Transfer & Storagemen's Ass'n of Montana.....	Billings	February
Northwest Transfer & Warehousemen's Ass'n.....	Seattle	May
Syracuse Traffic Club.....	Syracuse, N. Y.—Annual Meeting.....	January 15
Newark Traffic Club.....	Newark, N. J.....	January 5

BIRMINGHAM, ALA.**HARRIS TRANSFER
AND WAREHOUSE COMPANY**

(Equipped to Handle Anything)

MODERN FIREPROOF WAREHOUSE

Special Attention Given to Packing and Shipping

When shipping to Birmingham, consign goods to Harris
—he will look after your interests, also those
of your customer

Offices: CHAMBER OF COMMERCE BLDG.

BIRMINGHAM, ALA.**Wittichen Coal & Transfer Co.**

12 South 20th Street

Transfer and storage of household goods. Packing and
shipping. Forwarding and distributing agents. Heavy
Haulage, Motor Service.

BUILDING MATERIAL DEALERS

LITTLE ROCK, ARK.**WAREHOUSING
AND FORWARDING**Distributors of Pool Cars, Parcel Post Catalogs and
Merchandise**TERMINAL
WAREHOUSE COMPANY**

109-111 RECTOR AVENUE

All track connection

BERKELEY, CAL.**STUDENTS
EXPRESS & TRANSFER CO.**MOVING
STORING
FORWARDING

2132 SHATTUCK AVENUE

LOS ANGELES, CAL.**"SERVICE IN ITS FULLEST MEANING"
SEVEN STORY STRICTLY FIREPROOF
CONCRETE WAREHOUSE**Best of Storage Facilities.
Your business is solicited.**F. R. PALMATEER, PROP.**

1836 Arapahoe Street

Fidelity Fireproof Storage

SAN FRANCISCO, CAL.**BEST IN THE WEST****SAN FRANCISCO WAREHOUSE**When you Ship to California
Remember to Ship to**BEKINS FIREPROOF STORAGE**Prompt and Intelligent Returns,
Your Customers SatisfiedLos Angeles
1341 Figueroa St.Oakland
22d & San PabloSan Francisco
13th and Mission St.**LOS ANGELES, CAL.****Shattuck & Nimmo
WAREHOUSE CO.****Storage and Distribution**

Of All Non-Perishable Commodities

All cars handled at our own plant. No switch-
ing charge if cars are consigned in our care.Manufacturers and forwarders consolidating
car loads for Pacific Coast distribution are
assured of efficient service and prompt returns.**MEMBERS**Pacific Coast Furniture Warehousemen's Association, American
Chain of Warehouses, National Distributing Division,
Local Rotary Club and Chamber of Commerce



Putting Pacific Coast Sales in the Palm of Your Hand

The salesman who can market more of your products over a bigger territory than any other one man is a jewel you are after, isn't he. Aren't you open to consider, then, the proffered aid of the biggest salesman on the Pacific Coast?

One of the greatest merchandising organizations the world has ever known, the Union Terminal Warehouse Company, Los Angeles, is offering you the services of a sales force and a warehousing system that can put your product into every channel of sale and move it faster than any other form of merchandising.

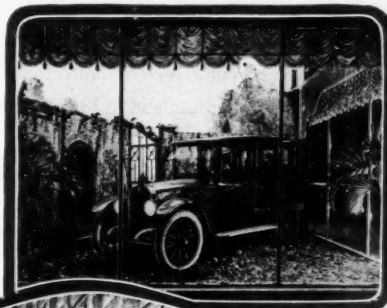
In face of this business-getting machine, a factory branch of your own is merely a toy. The possibilities Union Terminal service holds for you are unlimited. If you need a display room to add "special atmosphere" to your product, you'll find the Union Terminal plan a sales-getter.

The Union Terminal warehouses, docks, trackage, freight storing and moving facilities are the largest and best anywhere west of Chicago. But the great factor to interest you vitally is the new connecting link that brings the Union Terminal right square up to you, its sales department.

A big staff of sales specialists, schooled in the potentialities of the Pacific Coast region, works to bring you, the manufacturer, into contact with the largest number of buyers at the least possible expense. Your product meets all the jobbers, distributors and dealers—not just one or two—in minimum time.

If there's any special service a patron desires, we'll furnish that, too. Let us tell you more about Union Terminal advantages for you. Write now.

*Special showroom
sells goods*



*Ample switching
facilities make
speed*



Union Terminal Warehouse Company
Seventh & Central Avenue, Los Angeles, Calif.

Other aids we offer you:

- We store your merchandise.
- We insure it at the lowest rate in the West.
- We look after your shipments.
- We collect your drafts and accounts.
- We distribute your samples.
- We make you reliable credit reports.
- We trace your cars and save you demurrage.
- We furnish offices for your representative's use.
- We loan you money on your warehouse receipts.
- We furnish you a special display room, if desired.
- We furnish you factory space and market your output.

This new building adds 500,000 fire-proofed, dust-proofed square feet to the largest warehouse system west of Chicago.



Union Terminal Warehouse Co.

SAN FRANCISCO, CAL.

The Haslett Warehouse Company

228 Pine Street, San Francisco

Will handle your interests in the Far West with excellence of service that has grown from years of experience in California territory.

Some Haslett Helps For You

We will store or forward your merchandise.
 We offer also U. S. Customs and I. R. Bonded Storage.
 Yard storage provided. Public Weighers.
 Warehouse receipts issued—collections made.
 Pool car distributing and reforwarding a specialty.
 Drier for corn and other grains.
 Light or heavy hauling, city deliveries and general truck service.
 Handy location to retail districts and to freight stations.
 Lowest insurance rates in San Francisco.
 Every form of time-saving equipment.
 Any special service a client desires will be given personal and immediate attention.

S. M. Haslett, President P. E. Haslett, Secretary

DENVER, COLO.

**THE WEICKER
TRANSFER & STORAGE COMPANY**

Office, 1017 Seventeenth Street

New Fireproof Warehouse on Track

Storage of Merchandise and Household Goods

Distribution of Car Lots a Specialty

Every Facility for Handling Safes, Boilers and Heavy Machinery. Complete Fleet of Motor Trucks and Modern Equipment

Members { American Warehousemen's Association
 Illinois Furniture Warehousemen's Association
 New York Furniture Warehousemen's Association
 Pacific Coast Furniture Warehousemen's Association
 Central Warehousemen's Club
 American Chain of Warehouses
 Southern Furniture Warehousemen's Association

HARTFORD, CONN.

Tel. Connection Office: 335 Trumbull St.

Safety Vaults for Silverware

GEORGE E. DEWEY & CO.

JOSEPH M. PELCHAT Proprietor

Local and Long Distance

FURNITURE AND PIANO MOVING

Packing, Crating and Shipping of
 PIANOS, FURNITURES, CHINA

Only Fireproof Storage Warehouse in Hartford

HARTFORD-CONN.

The Roger-Sherman Transfer Co.

Freight Forwarding—Moving

TEAMS
 AUTO-TRUCKSGENERAL TRUCKING
 HEAVY RIGGING

1056 MAIN ST.

NEW LONDON, CONN.

B. B. Gardner Storage Co., Inc.

18 BLACKHALL STREET

PIANO AND FURNITURE PACKER, MOVER
 AND SHIPPER

Safe Mover—Freight and Baggage Transfer—STORAGE

WATERBURY, CONN.

The Ralph N. Blakeslee Co.

TRANSFER AND STORAGE

Special Facilities for Moving Heavy Machinery and Safes

Storage Warehouse for Merchandise

Separate Apartments for Furniture

WASHINGTON, D. C.

**Southern
Transfer and Distributing Co.**

727 12th STREET, N. W.

WASHINGTON, D. C.

Washington is the natural center of distribution for Maryland, Virginia, West Virginia, District of Columbia and Southeastern Pennsylvania.

We have had five years' experience in this class of work and are in a position to give maximum service at a minimum cost.

A FEW OF OUR CLIENTS:

Abilena Sales Co.
 American Law Co.
 Burlingame Chemical Co.
 Belding Bros. & Co.
 Bedford Springs Co., Limited
 Detmer Woolen Co.
 French Lick Springs Hotel Co.
 (Pluto Water)
 Funk & Wagnalls

General Forwarding Co.
 Horlicks Malted Milk Co.
 Kress & Owen Co.
 (Glyco Thymoline)
 McKesson & Robbins
 Lawyers Co-Operative Publishing Co.
 Pyro Chemical Co.
 S. S. White Dental Manufacturing Co.
 The Pineoleum Co., Inc.
 West Publishing Co.

Contracts made for the distribution of all kinds of advertising matter, trade papers, publications, calendars, samples and general merchandise,

by a uniformed force. Addressing and Mailing in all its Branches Re-Consigning, Forwarding and General Storage L. C. L. a Specialty

WASHINGTON, D. C.

Moving
 Shipping
 Storing**Smith Transfer & Storage Co.**

Office: 912 S Street, N. W.

Let Us Handle Your Washington Business

WE WILL PLEASE YOU

WASHINGTON, D. C.

UNITED STATES STORAGE CO.

418-420 TENTH STREET, N. W.

MEMBERS:

N. Y. Furniture Warehousemen's Association
 Illinois Furniture Warehousemen's Association
 Southern Furniture Warehousemen's Association



PROMPT REMITTANCES
 Efficient and Courteous Service

MOTOR TRUCKS

and

PADDED VANS

Modern Fireproof Warehouse

BOISE, IDAHO

PEASLEY**TRANSFER & STORAGE COMPANY**

STORAGE, TRANSFER AND FORWARDING

NINTH AND GROVE STREETS

CHICAGO, ILL.

BEKINS**HOUSEHOLD SHIPPING COMPANY**

Reduced Rates on Household Goods, Automobiles and Machinery

General Offices, 805 BEDFORD BLDG., Chicago
NEW YORK, BOSTON, BUFFALO, CINCINNATI

JACKSONVILLE, FLA.

UNION TERMINAL WAREHOUSE COMPANY

EAST UNION and IONIA STREETS

55 Rental Compartments

Track Capacity 52 Cars

Building of reinforced concrete with sprinkler system.
 Low Insurance Rate. Sub-Post Office and branch
 Western Union Telegraph. Joint Railroad Agent.
 L.C.L. freight loaded direct for line of road.

GENERAL MERCHANDISE STORAGE AND FORWARDING

Special attention to handling of pool cars.

CHICAGO, ILL.

EMPIRE Storage Company

Convenient to All Railroad Switches.

Modern FIREPROOF Warehouses for Storage of Household Goods

**MOVING PACKING SHIPPING**

Heated Piano Rooms
 Art Galleries
 Vaults for Valuables
 Private Compartments for Furniture
 Automobiles Stored
 Motor Truck Service



Established 1891

Capacity 1,500,000 cu. ft.
Low Insurance Rate.

General Office
 52nd St. and
 Cottage Grove Ave.
 Chicago

MEMBERS:

Illinois Furniture Warehousemen's Association
 New York Furniture Warehousemen's Association

JACKSONVILLE, FLA.

Wiesenfeld Warehouse Company

P. O. Box 1133

General Merchandise Storage and Distributing

References:

Any bank, jobber or transportation man in the city

ATLANTA, GA.

CATHCART**TRANSFER & STORAGE COMPANY**

Moves, Stores, Packs, Ships
 Household Goods Exclusively

Office and Warehouse, 6-8 MADISON AVE.

ATLANTA, GA.

Warehousemen

MORROW**TRANSFER & STORAGE COMPANY**

COMMERCIAL STORAGE

Distributors—R. R. Trackage—Carloads a Specialty

Household Goods Moved, Stored, Packed and Shipped
 180-184 MARIETTA STREET

ATLANTA, GA.

Warehousemen

Distributors

Southern Sales & Storage Co.

Markets secured for Meritorious Mdse.
 Concrete Warehouse, R. R. Trackage,
 Make our office your Southern Headquarters,
 We have an efficient Sales Force.
 13 Produce Place

CHICAGO, ILL.

Soo Terminal Warehouse Company

General Merchandise Storage and Distribution
 Direct Rail and Tunnel Connection with All Trunk Lines.

519 West Twelfth St.

"THE ECONOMICAL WAY"

If Your City Isn't Represented Here

Put it on the shippers' map by
 inserting your card in this space.

CHICAGO, ILL.

ESTABLISHED 1874

HEBARD

Storage Warehouses



Our Seventh Warehouse

now under construction on Broadway, near Devon Avenue, which will handle all Rogers Park or North Shore shipments.

All collections on shipments made to us promptly remitted. Member of Illinois, New York and Southern Warehousemen's Associations.

Warehouses E-F, North Side, Sheridan Road and Sheffield Ave.
Warehouses A-B-C-D, West Side, Ogden and Winchester Aves.

FORT WAYNE, IND.

BROWN TRUCKING COMPANY

MOVING, DISTRIBUTING, STORAGE AND
GENERAL TRANSFER—MOTOR SERVICE

Pool Cars a Specialty

Office, 125 W. Columbia Street

FORT WAYNE, INDIANA

Private Siding With All Railroads

Pettit's Storage Warehouse

FIRE PROOF BUILDING

ROOMS FOR HOUSEHOLD FURNITURE

General Merchandise Warehousing and Transferring
Factory Distributors

SOUTH BEND, IND.

Warner Warehouse Company

Merchandise Storage and Distribution
Branch House Service for Manufacturers

SOUTH BEND is a natural distributing center for Michigan, Indiana and Ohio. Our warehouse is located on New York Central tracks and we have free switching connections with all lines entering the city.

518-524 South Pine St.
SOUTH BEND, INDIANA

H. A. PRUYNE, Manager

Members: { American Warehousemen's Association
Central Warehousemen's Club
American Chain of Warehouses

INDIANAPOLIS, IND.



Our Service Consists of

Warehouse for Manufactured Articles.

Prompt shipment for all orders.

Prompt reports of shipments as you want them.

Trucks for Drayage Equipment.

We are, in fact, ready to be your Shipping Department.

Located in the heart of the U. S. A., within 12 to 24 hours of your customers in Indiana, Ohio, Illinois, Kentucky and Michigan.

Insurance rate, 30c—extra hazardous goods not taken.

Six-story and basement, heavy mill construction, sprinkler equipped, A. D. T. Watchman Service. 150,000 square feet heated to 50°.

We solicit your business and refer you to any of our customers as to our ability to do it right.

Railroads:

Penna. Ry.; C. C. C. & St. L. Ry.; C. I. & W. Ry.; L. E. & W. Ry.; Ills. Central Ry.; C. I. & L. Ry.
18 Traction Freight Lines.

The Indianapolis Warehouse Co., Inc.

FRANK A. TODD, V. P. and Gen'l Mgr.

West New York and Canal

INDIANAPOLIS

INDIANA

INDIANAPOLIS IND.

We Have the Very Best of Equipment for Handling
Heavy Machinery, Boilers, Engines, Tanks
Vaults and Safes for Erecting Smoke Stacks



INVESTMENT \$200,000.00

We have just completed one of the most modern fire-proof warehouses in the country—centrally located on a privately owned railroad switch accommodating eight cars.

We are equipped to give the very best service in all kinds of moving and packing. All shipments consigned to our care will receive prompt attention and our twenty-five years' experience and reliability insures this service.

HOGAN TRANSFER & STORAGE CO.

Member
N. F. W. A. and I. F. W. A.

Established
1892

If Your City Isn't Represented Here

Put it on the shippers' map by
inserting your card in this space.

LOUISVILLE, KY.

SAFETY

Transfer & Storage Co., Inc.

Offices: 105 South Hancock Street

HOUSEHOLD GOODS

Moved, Stored, Packed, Forwarded

—Motor Truck Service—

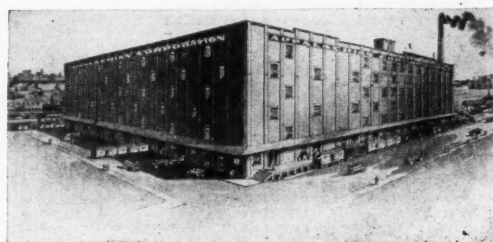
Pick Your Consignee

from the companies listed in
this section—they are the "live
wires" of the field and will han-
dle your shipments promptly
and efficiently.

It is also worth your while
to earn their reciprocity.

NEW ORLEANS, LA.

APPALACHAIN SERVICE



**SPACE—STORAGE—DISTRIBUTION
and FORWARDING**

To the WORLD'S COMMERCE

Through the

PORT OF NEW ORLEANS, U. S. A.

STORAGE We own the Largest Modern
Public and Government Bonded
Warehouse in the South. Contains 7,500,000 cubic
feet, equal to more than 14 acres of surface storage
facilities, caring for 3,000 carloads of material at one
time. Our sidings have a capacity of 24 cars. Direct
connection with all railroad and steamship lines
entering New Orleans.

DISTRIBUTION Our facilities for
giving our clients a
Perfect Distribution Service are unequalled by any
warehouse in the Southern States.

FORWARDING We maintain a well or-
ganized Freight For-
warding Department for both Import and Export
business. We secure lowest freight rates, attend to
validation of bills of lading, take out consular in-
voices, render customs service and deliver merchan-
dise in proper time and condition to steamer or
railroad.

FOR SERVICE ADDRESS

APPALACHIAN CORPORATION

INC. OF LOUISIANA

LOUIS B. MAGID, President

South Peters, Thalia, South Front and Erato Streets

NEW ORLEANS, U. S. A.

"The City of New Opportunities"

SPECIAL

Our Negotiable Receipts are Current in all financial
centers. When desired we assist. We also arrange
Marine Insurance and Advances on Carload Shipments.

BALTIMORE, MD.

Phone Gilmor 3000.

THOS. H. VICKERY, President.

**BALTIMORE STORAGE
& MOVING COMPANY**

1710 to 1720 Edmondson Ave.

Members { N. Y. F. W. A. Fireproof Wh's'e in rear
Balt. F. W. A.**BALTIMORE, MD.**

Leonidas Levering, Pres.

CENTRAL WAREHOUSE CO.
STORAGE—TRANSFER—SHIPPING

517-525 W. Baltimore St.

"DISTRIBUTING AGENTS"Consign Your Pool-Cars Direct to Us. We Handle
Everything**"EXPERT SERVICE"****"LOW FIRE INSURANCE"****BALTIMORE, MD.****Graham's Storage Warehouse***The Largest in Baltimore*

Established 1887 GEO. D. MAGRUDER, Pres. and Gen'l Manager

800 Storage rooms, one to ten Van load capacity.
Vans load and unload in the centre of the building.**MOVING — PACKING — SHIPPING**
MOTOR EQUIPMENT

Send us your Baltimore Consignment

Members, N. Y. F. W. A. — I. F. W. A. — Baltimore, F. W. A.

**If Your City Isn't
Represented Here**Put it on the shippers' map by
inserting your card in this space.**BALTIMORE, MD.****THE KAUFMAN**
Fire-proof Storage Warehouses**BALTIMORE, MD.**Send your Baltimore shipments to
MONUMENTAL STORAGE COMPANY**BALTIMORE, MD.**

Fred I. Savage

George P. Savage

THE SAVAGE TRANSFER CO.
TRANSFER AND LIVERYWe Haul Anything, Anywhere, Any Time, by Motor or Horse-
Drawn VehiclesC. & P. PHONES: SOUTH { 321
1057

1202-4-6-8-10-12-14 Race Street, BALTIMORE, MD.

Storage Warehouse: 519 W. Lee St. Garage: 118-120 W. West St.

THEATRICAL HAULING A SPECIALTY**BALTIMORE, MD.****Security Storage & Trust Company**

15 W. North Avenue

FIREPROOF WAREHOUSES**MOTOR EQUIPMENT****EFFICIENT SERVICE
TO WAREHOUSEMEN**

Members of

Baltimore Furniture Warehousemen's Associations
New York, Illinois and American Warehousemen's Associations**If Your City Isn't
Represented Here**Put it on the shippers' map by
inserting your card in this space.

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H. H. WIGGIN, PRESIDENT

S. G. SPEAR, TREASURER

TERMINAL WHARF AND RAILROAD WAREHOUSE COMPANY

50 Terminal Street

Charlestown District, Boston



Storage of Wool, Cotton and
General Merchandise

LOWEST INSURANCE RATES
DIRECT TRACK CONNECTIONS
BOSTON & MAINE R. R.

SHIPPING DIRECTIONS
MYSTIC WHARF
BOSTON, MASS.

CARTAGE TO AND
FROM FREIGHT STATIONS
AND BOAT LINES

Fumigation of Foreign Cotton
and Cotton Waste

AND OTHER MATERIALS AS REQUIRED
BY U. S. GOVERNMENT

WEIGHING, SAMPLING, AND ALL
SERVICES USUALLY PERFORMED
BY AN UP-TO-DATE WAREHOUSE

We will Lease or Build to Suit Tenants

BOSTON, MASS.

Established 1880

T. G. BUCKLEY CO.

MOVERS OF HOUSEHOLD GOODS AND PIANOS
MOTOR TRUCK SERVICE

REINFORCED CONCRETE WAREHOUSE

OFFICE and WAREHOUSE, 690 DUDLEY STREET

Members N. Y. F. W. A.

HOLYOKE, MASS.

Holyoke Warehouse Co.

Park and Crescent Streets

Modern Fireproof
Warehouse

B. & M. R. R. Siding

We specialize in Merchandise Distribution, Pool Cars or Spot Stocks, Yard Storage, New Autos, Trucks, Farm Implements and Machinery.

TRY OUR SERVICE

Heavy Haulage

Truck Service

HOLYOKE, MASS.**Sheldons Transfer & Storage**

ESTABLISHED 1870

Main Office 637 Main St. Branch Office 81 Main St

SPECIALISTS IN POOL CARS

Storage Space, 50,000 sq.ft. N.Y.N.H.&H. and B.&M. Sidings

Pick Your Consignee

from the companies listed in this section—they are the "live wires" of the field and will handle your shipments promptly and efficiently.

It is also worth your while to earn their reciprocity.

NEW BEDFORD, MASS.

NEW BEDFORD STORAGE WAREHOUSE CO.

Modern Sprinklered Warehouses, Approximately 400,000 sq. ft. Floor Space.

Low Insurance Rates

Excellent Rail and Water Connections

N. Y., N. H. & H. R. R. and New Bedford Line, from Pier 40, North River, New York. Daily sailings.

We operate a large, modern pier and storage shed on 25-ft. channel.

Distribution and Pool Car Shipments Solicited

BAY CITY, MICH.

BELL PHONE 1131-R

VALLEY PHONE 731-L

P. Van Haaren & Sons Storage Co. FIRE PROOF STORAGE

Steel Compartments for Furniture Storage
GENERAL TRANSFER LINE
MOTOR TRUCK SERVICE

P. Van Haaren

BAY CITY, MICHIGAN

DETROIT, MICH.

GENERAL STORAGE AND CARTAGE CO.

Main Offices:

Grand River and Lorain Avenues
GENERAL MERCHANDISE STORAGE

Forwarding, Distributing and Reshipping Agents. Custom
House Brokers—Expert Traffic Service

SHIP US YOUR CARLOADS FOR DISTRIBUTION

50 Car Track Space on M. C. R. R. and Grand Trunk
Motor Trucks—1 to 10 Tons Capacity

If Your City Isn't Represented Here

Put it on the shippers' map by
inserting your card in this space.

DETROIT, MICH.

DETROIT'S LEADING MOVERS.

Detroit Storage Co.



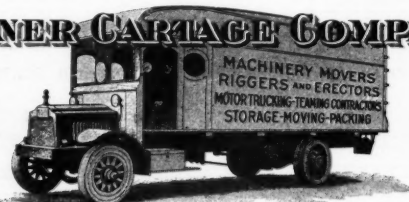
Main Office and Fireproof Warehouse
MOVING, PACKING, SHIPPING

MOTOR EQUIPMENT

Corner East Grand Boulevard and Beaubien St.,
DETROIT, MICH.

DETROIT, MICH.

TURNER CARTAGE COMPANY



Phone
Main
2660

Shipments of household goods and merchandise will be handled under personal supervision of company officials.

334-340 Lafayette Blvd., DETROIT, MICH.

GRAND RAPIDS, MICH.

Shank Fireproof Storage Company

Largest Fireproof Storage Warehouse in Western Michigan.
Merchandise and Household Goods.

Members I. F. W. A.

If the city to which you are shipping is not represented in this list, choose the nearest as the geographical arrangement will help you.

MINNEAPOLIS, MINN.



The Gateway to The Great Northwest

We Can Handle Your Entire Distribution Throughout the Northwest

Our modern warehouse combined with our efficient organization is thoroughly equipped with every facility for the speedy and economical handling of your goods in the Great Northwest.

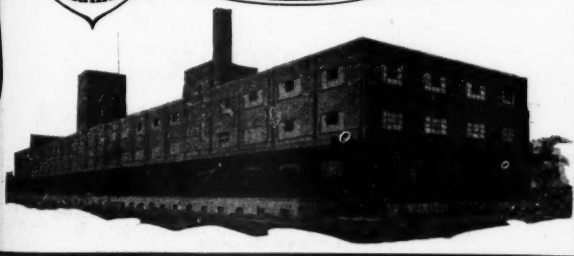
Our loading platform adjoining the East Hennepin Joint Freight Station permits direct handling and distribution of all less-than-carload freight to the NINE RAILROADS of Minneapolis through this single freight station without drayage—a facility not found elsewhere west of Chicago.

We specialize in receiving carload shipments and reshipping the goods to various points in less-than-carload lots. We also handle all classes of merchandise for storage.

Consign your Shipments to

Minneapolis Terminal Warehouse Company

Minnesota Transfer
East Hennepin Station



ST. PAUL, MINN.

The Central Warehouse Co.

Minnesota Transfer, Minn.

Merchandise, Bonded and Cold Storage Industrial Sites

At the junction of nine railroads, midway between the Twin Cities. L. C. L. shipping without carting. Motor trucks for local deliveries. 40 acres of ground. Six miles of trackage operated by our electric locomotives.

BILLINGS, MONTANA

Billings Warehouse & Trading Co.

Incorporated

204-216 North 21st Street

Branch House Service for
National Distributors

Investigate the immense and rapidly developing territory for which Billings is the best distribution center.

MISSOULA, MONT.

Security Warehouse & Transfer Co.

(Incorporated)

Warehousing of every description: Storing, Packing, Carting, Shipping. R.R. Siding. Manufacturers' distributors. We solicit your Western Montana shipments.

KANSAS CITY, MO.

QUICK ACTION WINS IN THE BATTLE FOR BUSINESS!

We borrow other people's shipping and distribution problems and turn them into results.

Fireproof Warehouses and Distribution Docks

L. T. Crutcher Warehouse Co.

Distribution & Warehousing

1411 St. Louis Ave.

Kansas City, Mo.

If the City to which you are shipping is not represented in this list, choose the nearest as the geographical arrangement will help you.

ST. LOUIS MO.

A Transfer Company with an Ability to Serve

ST. LOUIS
America's Fourth
Largest City

Nine Freight Depots; One Mile of Platforms
 More than 250,000 Square Feet of Storage
 and Warehouse Space
 225 Teams and 75 Motor Trucks

We are especially well equipped for the prompt handling of consolidated cars for distribution both locally and for points beyond. When consigned care Columbia Transfer Company (La Salle Street Station) you get the benefit of **Daily Package Car Service** from St. Louis to the West, Southwest and Southeast.

Leased Motor Truck Service - By Hour, Day or Contract -

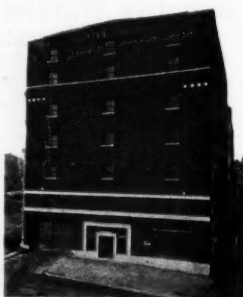
COLUMBIA
TRANSFER CO.
America's Largest
Transfer
Organization
\$2,000,000 Capital

KANSAS CITY, MO.

Fireproof Warehouse
 Convenient to All
 Freight Depots
 Send your consignments in our care
 Members of I. F. W. A.

L. Leritz & Son

2616-18-20 Warwick



Ins. Rate 22c

Pick Your Consignee

from the companies listed in this section—they are the "live wires" of the field and will handle your shipments promptly and efficiently.

It is also worth your while to earn their reciprocity.

KANSAS CITY, MO.

Are You Giving Your Customers Service?

The present congested conditions of our railroads and slow movement of less than carload freight, and the possibility of embargoes on many commodities, make it more imperative than ever that you carry suitable stocks of your goods at important Western distributing centers to properly take care of your trade in that territory.

We invite you to make use of our warehouse as a branch of your own establishment for this purpose. Our building is of modern fireproof construction and equipment—automatic sprinkler system—low insurance rates—free switching of carloads. Ample teaming equipment and twenty years of knowing how, insures prompt, efficient and satisfactory service.

D. A. MORR
TRANSFER & STORAGE COMPANY

Members { Central Warehousemen's Club
 American Chain of Warehouses
 American Warehousemen's Association
 Illinois Furniture Warehousemen's Association
 New York Furniture Warehousemen's Association

Please mention this paper

OMAHA, NEBR.

Gordon Fireproof Warehouse & Van Co.

Main Office: 219 NORTH 11th STREET

Six warehouses covering over one city block. 200,000 square feet of floor space. Four warehouses equipped with automatic sprinkler systems.

Warehouses served by private tracks on the C. B. & Q. and the C. & N. W. (joint track); and the Illinois Central. All roads absorb switching charges.

Accommodations for brokers, jobbers, automobile manufacturers and dealers.

Household Goods Packed, Stored and Forwarded

MOVING — TRANSFER — FORWARDING

MEMBER { New York Furniture Warehousemen's Association.
Illinois Furniture Warehousemen's Association.
Central Warehousemen's Club.
Pacific Coast Furniture Warehousemen's Association.

OMAHA, NEBR.

THE
"CITY OF OPPORTUNITY"

Represented by the

Pacific Storage & Warehouse Co.

1007-9-11 JONES STREET

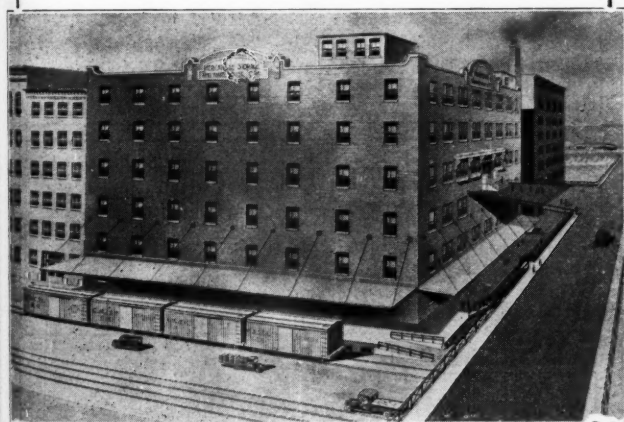
We have studied the problems of the national distributor of manufactured articles and merchandise and have both the experience and facilities to care for business of this kind in a way that will satisfy the most critical.

Write us about the goods you have to be distributed in this territory and we shall be glad to quote prices for delivery, storage or reshipping.

**MOTOR TRUCK SERVICE — 75,000
SQUARE FEET OF STORAGE SPACE**

Members of the Central Warehousemen's Club

OMAHA, NEBR.



NEW FIRE PROOF BUILDING

1,500,000 Cubic Feet Storage and Leasing Space, Sample Rooms, Office Space, Merchandise, Storage and Distribution Exclusively.

Mercantile Storage & Warehouse Company

Omaha, Nebraska.

We Specialize in Merchandise Distribution

CAMDEN, N. J.

Established 1903

Troth's Model Warehouses

5th and Byron Streets

MANUFACTURERS' DISTRIBUTORS

Correspondence Solicited

Direct Delivery Service Throughout Philadelphia

ATLANTIC CITY, N. J.

ELDREDGE EXPRESS and STORAGE WAREHOUSE CO.

Office: 110 N. South Cardina Avenue

Inter-City Auto Service

Heavy Hauling



Railroad
Siding and
Storage Yard

Storage for
Goods and
Merchandise

Piano Moving

Phone 108

EAST ORANGE, N. J.

Established 1887

R. T. BLAUVELT, Pres.

LINCOLN STORAGE WAREHOUSES

FIREPROOF NON-FIREPROOF MOTOR EQUIPMENT

Members of New Jersey—New York—Illinois—Southern
Warehousemen's Associations

Principal Office, 85 MAIN STREET

HOBOKEN, N. J.

FREIGHT STORAGE
5 BLOCKS FROM D. L. & W. FERRIES

LOW INSURANCE
RATES ON REQUEST

HUDSON STORES, INC.

Office and Warehouse:
Ferry Street and Park Avenue, Hoboken, N. J.
Phones—Hoboken 1810-1811-1812

NEWARK, N. J.

Estab. 1850 Jos. V. Lupo, Pres. & Treas.
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JOB De CAMP, INC.

80 PARK PLACE
Transfer of Household Goods Storage of Household Goods
Freight, Heavy Haulage, Mdse., New Autos, Imple-
Motor Service ments, Yard Storage.

Factory Distributors
N. J. W. A. Member of A. W. A. and N. Y. F. W. A.

NEWARK, N. J.

ESTABLISHED 1864

SHIP TO NEWARK'S
LEADING FURNITURE WAREHOUSE

KNICKERBOCKER STORAGE WAREHOUSE COMPANY

JOHN MULLIGAN, P. es. GEO. L. BARBER, Gen. Mgr.
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MOVING PACKING SHIPPING
MOTOR EQUIPMENT

MEMBERS N. Y. F. W. A. and N. J. F. W. A.

NEWARK, N. J.**The McGANN Co., Inc.**

Offices, 100 Front Street Telephone 1620 Market.
Merchandise Storage, Trucking and
Distributors

NEWARK, N. J.**Model Storage Warehouses**

54-56 Belleville Ave.

NEWARK, N. J.

Known All Over the
UNITED STATES

for their
EFFICIENCY

IN HANDLING HOUSEHOLD GOODS SHIPMENTS
IN NEW JERSEY

NEWARK, N. J.

F. H. Mooney, President

Est. 1882

Mooney's Storage Warehouses

Offices: 556-8 Market Street, Newark, N. J.

Phones: 4370-1 Mulberry

Merchandise Storage, Distributors. Centrally located to
all Railroad Terminals. Daily Motor Service to New York
City and Vicinity.

TRENTON, N. J.

"Expert Service"

Arcade Express & Storage Co.

Harry A. Douglass, Prop.

Merchandise and Furniture Storage Warehouse

Distributors and Forwarders
In Main Business Section of City

Motor Van Service

13-17 East State Street, Trenton, N. J.

Bill via any R. R.

TRENTON, N. J.**Petry****Express & Storage Co.**

(INCORPORATED)

STORAGE WAREHOUSES

MERCHANDISE and HOUSEHOLD GOODS

MOVERS—PACKERS—SHIPPERS

MOTOR VAN SERVICE

Carloads Distributed. Manufacturers' Distributors.
Members N. Y. F. W. A. and I. F. W. A.

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STORAGE & WAREHOUSE CO., INC.

Jas. G. Perkins, Custom House Broker
1 DEAN STREET

Storage, Transferring and Forwarding
Direct Track Facilities Pool Car Distribution

BINGHAMTON, N. Y.**THREE WAREHOUSES**

33 Years in Business

Merchandise Distribution

and Pool Car Shipments Given Especial Attention

Storage of Household Goods, Merchandise, Implements
and Machinery. Auto Trucks, Heavy Haulage.

Members of the Chamber of Commerce of Binghamton, and also
in the N. Y. Furniture Warehouse Association.

COLE & GRAY

203 State Street

Binghamton, N. Y.

BINGHAMTON, N. Y.

Member Chamber of Commerce

JOHN B. SOUTHEE

STORAGE WAREHOUSE AND VAN OFFICE

MOVING AND TRUCKING OF ALL KINDS

178 STATE STREET

Office Phone 1366
House Phone 1799Residence,
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BRONXVILLE, N. Y.

Gramatan WarehouseNew, Modern and Up-to-Date Furniture
Warehouse Under Construction

ORDERS ACCEPTED FOR COMING SPRING

PACKING—MOVING—STORAGE

R. R. Siding on N. Y. Central R. R.

FRANK B. VALENTINE
MANAGERTelephones:
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BROOKLYN, N. Y.

V. O. A.

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Fifty-Second Street Storage Co., Inc.

5107 4th Ave.

Storage Merchandise Distribution Forwarding

It is our aim to give your client prompt and efficient service.It is our business to carry out your policy in Brooklyn.

Consign your shipments us c/o thru Bush Terminal

BROOKLYN, N. Y.

Cable Address, *Jenkinis*
Western UnionLong Distance Phones
3100-3101-3102 Bedford

ABSOLUTELY FIREPROOF

Long Island Storage Warehouses

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BRANCH WAREHOUSES

881-891 Park Avenue 781-789 Kent Avenue

To save delay in consignments for delivery to any part of New York City or Brooklyn, mark goods in our care to "Eastern District Terminal, Brooklyn." This is the center of Greater New York—no delay due to congestion.

Try shipping this way. We know

BROOKLYN, N. Y.

Established 1889

**Chas. D. Strang's
Montauk Storage Company**

195 So. PORTLAND AVE.

Send your shipments to Brooklyn in my care.
Both your customers and yourself will receive
prompt, careful and courteous attention.Storage, Moving, Packing and
Shipping of Household Goods.

N. Y. F. W. A.

I. F. W. A.

S. F. W. A.

BUFFALO, N. Y.

BUFFALO**STORAGE & CARTING COMPANY**STORAGE, TRANSFER AND
FORWARDING

Warehouse on New York Central Tracks

BUFFALO, N. Y.

WE WILL LOOK AFTER YOUR INTEREST,
ALSO THAT OF YOUR CUSTOMERS**O**UR large, specially-built, six-story household goods warehouse is one of the finest between New York and Chicago. (Capacity 1000 van loads.) With our corps of expert workmen and unequalled facilities, we can render prompt and efficient service to your Buffalo patrons.*Furniture Stored, Packed or Shipped
to Any Part of the World*Convenient to the railroad switches
Motor Trucks for Prompt DeliveryLow Insurance Rates
Fireproof Vaults**COLD SPRING STORAGE COMPANY**

1432-1442 Main Street

J. W. POWELL, President and General Manager

Members of Buffalo Chamber of Commerce, Illinois Furniture Warehousemen's Ass'n, New York Furniture Warehousemen's Ass'n.

BUFFALO, N. Y.

O. J. GLENN & SONEverything in the Line of Moving,
Carting, Packing, Storage

OFFICE: 204 TERRACE STREET

ELMIRA, N. Y.

Elmira Storage & Sales Co., Inc.

BEST DISTRIBUTING POINT in Western New York and Pennsylvania.

Warehouse, 50,000 square feet floor space, can accommodate 100 cars of merchandise.

Free switching privileges D., L. & W., Erie, Penna. and L. V. railroads. Switch enters building; can load and unload under cover.

General Merchandise and Storage. Forwarding and Transferring a specialty.

Competent help in office and warehouse. We can be used as a branch house at no extra expense.

We do our own trucking.

FLUSHING, N. Y.

Blackham Storage & Trucking Co. INC.

We do a general storage, moving, carting and packing business covering Flushing and Long Island. Try our service, you'll like it.

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ITHACA, N. Y.

MITCHELL THE MOVER, Inc.

Household Goods and Merchandise Storage

DISTRIBUTION OF MANUFACTURERS' STOCKS

Transfer of goods and heavy and long distance hauling. Motor and horse drawn vans. An expert packing force.

GLENS FALLS, N. Y.

H. A. STEVENS & SON

Furniture and Merchandise Storage. Local and Long Distance Moving Packing, Crating.

NEW YORK, N. Y.

"Every Room is an Actual Vault"

Atlas Fireproof Storage Warehouse Co.

57 159 West 124th Street (near Seventh Ave.)

Moving—Packing—Storing—Shipping
A terminal of every railroad in immediate vicinity. Bill "Harlem Terminal." Automobiles taken in dead storage.

Consign your shipment to us for proper attention.

NYFWA

VOA

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Put it on the shippers' map by inserting your card in this space.

NEW YORK, N. Y.



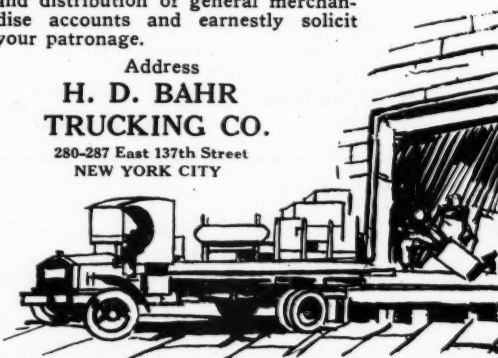
The Claremont Storage Warehouse and the H. D. Bahr Trucking Company are operated under the same management and ownership.

The combined facilities of these two establishments offer you the most complete service in upper New York City.

We are specialists in the storage and distribution of general merchandise accounts and earnestly solicit your patronage.

H. D. BAHR TRUCKING CO.

280-287 East 137th Street
NEW YORK CITY



NEW YORK, N. Y.

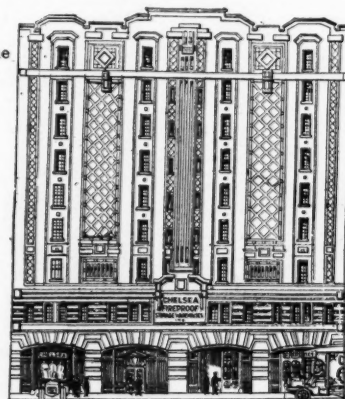
Chelsea Fireproof Storage Warehouses, Inc.

COMPLETE SERVICE TO SHIPPERS

Storage, Moving, Packing, Shipping, Express and General Trucking

Ship to the
Chelsea

Equipped
for prompt
service.



Our Harlem Warehouse

Chelsea Fireproof Storage Warehouses, Inc.
LOUIS SCHRAMM, Pres. WM. F. HAHN, Secy and Treas.

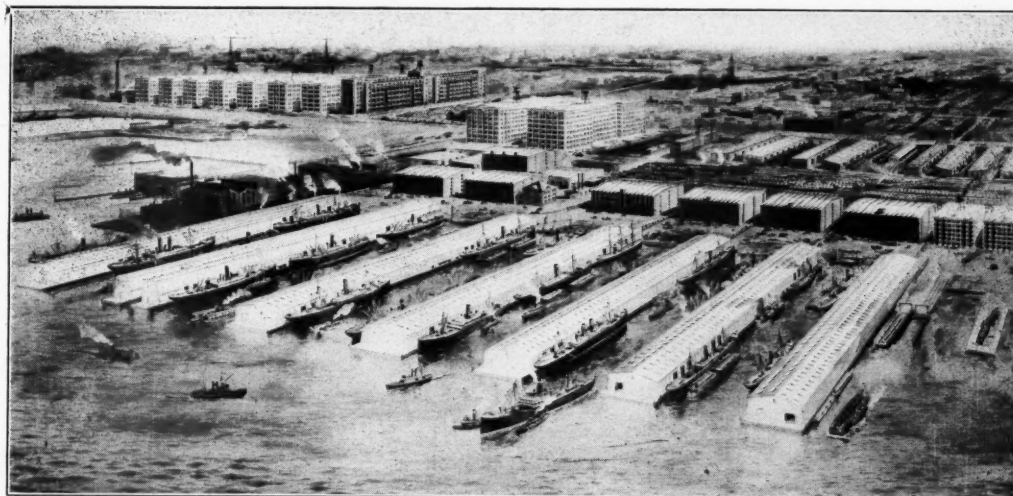
Main Office
426-434 West 26th St.

Harlem Branch
112-120 West 107th St.

Members of

New York Furniture Warehousemen's Association
Illinois Furniture Warehousemen's Association
The Merchants' Association of New York

NEW YORK, N. Y.



The Most Extensive Distributing Warehouse and Terminal Facilities in the Port of New York

The Distributing Service of the Bush Terminal offers manufacturers a solution of every problem connected with the shipment and distribution of merchandise or raw material. We provide you with the facilities of an organization which has taken 25 years and millions of dollars to build up.

We do for you what it would be impossible for you to do for yourself unless you had all of our equipment and facilities and at less expense.

The Bush Distributing Service will handle your shipments, warehouse them and make deliveries in any sized lots from stock, exactly the same as if you had your own warehouse.

We will repack and relabel the merchandise for shipment to customers as you send the orders in. Every detail in connection with transportation, billing, etc., will be attended to.

Very complete information of the facilities and low cost of this service is yours for the asking. This reasonable service merits your immediate and serious attention—Now.

BUSH TERMINAL COMPANY

100 BROAD STREET

NEW YORK, N. Y.

NEW YORK, N. Y.

Metropolitan

Fireproof Storage Warehouse Co.

14-39-41 WEST SIXTY-SIXTH STREET

Near Central Park

CHARLES S. MORRIS, Pres. and Treas.

LAWRENCE S. MORRIS, Sec'y and Gen. Manager

We Bid for Your Business on a Basis of
Service—"We Know How"TWO FIREPROOF BUILDINGS
MOTOR OR HORSE-DRAWN VANS
AN EFFICIENT PACKING FORCE

Adjacent to all Freight Terminals

ESTABLISHED 1875
"That means something"Members of New York Furniture Warehousemen's Ass'n.
Illinois Furniture Warehousemen's Ass'n.
Southern Furniture Warehousemen's Ass'n.
Van Owners' Ass'n of Greater N. Y.
New Jersey Warehouse & Van Owners' Ass'n.

NEW YORK, N. Y.

**MORGAN & BROTHER**Storage Warehouses
and Motor Vans

MOVING STORAGE PACKING

Our reputation in handling collections on consign-
ments is your guarantee in selecting us as your
correspondent in New York City*Furniture and Works of Art Boxed
and Shipped to all Parts of the World*

230-232-234-236 WEST 47th STREET

TELEPHONE
52 BRYANT

Near Broadway

Cable Address: MORGANWARE

Members:

New York Furniture Warehousemen's Association
Illinois Furniture Warehousemen's Association
Van Owner's Association of Greater New York

NEW YORK, N. Y.

Julius Kindermann & SonsThree large fireproof storage warehouses adjacent
to Washington Heights and all counties
in Westchester section

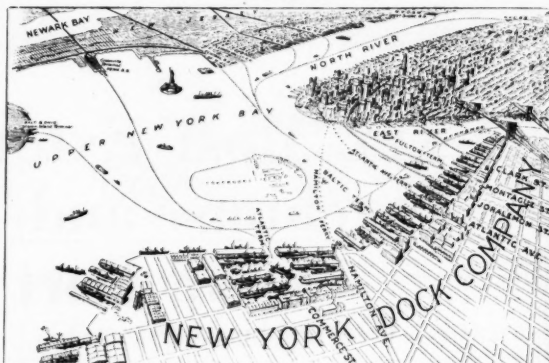
1360-62 Webster Avenue, near 170th Street, Bronx

NEW YORK, N. Y.

Mott Haven Storage Warehouse Co.Fireproof and Non-fireproof Warehouses
Factory Distributors — Motor ServiceAdjacent to all Bronx Terminals. Economic and
Satisfactory Service

THIRD AVENUE AND 140th STREET

NEW YORK, N. Y.

**Largest Bonded and Free Warehouse
and Pier System in the Western
Hemisphere**Occupying approximately 2½ miles of the Brooklyn
waterfront.159 bonded and free warehouses having a storage ca-
pacity of 65,435,000 cubic feet or 116.2 acres of floor space.

34 PIERS

3 RAILROAD TERMINALS

Buildings for lease with lighterage and railroad facilities

NEW YORK DOCK COMPANY

44 Whitehall Street, New York

Calendar showing map of New York Harbor sent on request

NEW YORK, N. Y.

Phone Spring 8732-8733

North River Warehouses, Inc.

606-608-610 Washington Street, New York City

Merchandise Storage and Distribution
Centrally Located To All RR Terminals**If Your City Isn't
Represented Here**Put it on the shippers' map by
inserting your card in this space.

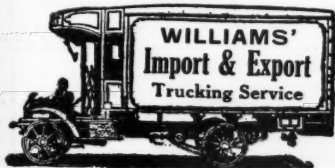
WILLIAMS SHIPPING AGENCY



Weighing, Sampling
Re-coopering, Forwarding.
Williams Shipping Agency, Inc.
24 Stone St. Tel. Broad 856

Custom House License 306

Est. 1886



We Operate 40 Six-Ton Trucks.
Carloads Distributed. Deliveries to all
Railroads and Steamships.
WILLIAMS SHIPPING AGENCY, Inc.
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Warehouse: 168 Front St. Tel. 1943 John
NEW YORK

Custom House License 306 Est. 1886

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CARLOAD LOTS OUR SPECIALTY

Freight Delivered to all Railroads
and Steamships.

Storage and Export Packing

WILLIAMS SHIPPING AGENCY, Inc.

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Tel. 856-857, 1967 Tel. 1943 John
Broad NEW YORK

EXPORT PACKING

We are prepared to properly pack
and bale goods for Export: make
up Packing Lists in Pounds or Kilo-
grammes. Consular Invoices in all
languages. Also, Weighing, Samp-
ling, Cooperage, Trucking, Lighter-
ing and Forwarding.

WILLIAMS SHIPPING AGENCY, Inc.
24 Stone Street
Tel. Broad 856-857 New York

NEW YORK, N. Y.

Vandam Warehouse Co., Inc.

General Offices—No. 29 Broadway
NEW YORK CITY

Phone Whitehall-353.

8 CITY WAREHOUSES

also

Waterfront Pier and Warehouses:
MARINER'S HARBER STATEN ISLAND

NEW YORK, N. Y.

"EXPERT SERVICE PAYS"

MOVING PACKING SHIPPING

VAULTS for STORING PACKAGES
of SILVER PLATE and VALUABLES

Our central location and modern equipment
enable us to offer you an unusually efficient
service for your New York consignments.

Members of New York Furniture Warehousemen's Association
Illinois Furniture Warehousemen's Association

THE WEST END STORAGE WAREHOUSE

Grant Wayne, Manager

Louis J. Crumm, Supt.

202-210 West 89th Street



Consign all C. L. & L. C. L. Ship-
ments for Delivery to Warehouse

B. & O. R. R.—135th St. and
Harlem River Station
C. R. R. of N. J.—132d St. and
S. Boulevard Station
D. L. & W. R. R.—135th St.
and Harlem River Station
Erie R. R.—135th St. and Har-
lem River Station
Lehigh Valley R. R.—E. 124th
Street Station
L. I. R. R.—Harlem and Mor-
risania Station
N. Y. C. & H. R. R. R.—130th
Street Station
N. Y. N. H. & H. R. R.—Har-
lem River Station
Penn. R. R.—E. 125th Street
Station
West Shore R. R.—130th Street
Station

NIAGARA FALLS, N. Y.

WILLIAM YOUNG

TRANSFER AND STORAGE OF
HOUSEHOLD GOODS

MACHINERY AND SAFE MOVING A SPECIALTY

"Unexcelled SERVICE"

ROCHESTER, N. Y.

Arthur S. Blanchard, President and Treasurer

Blanchard Storage Co., Inc.

Storage
Moving

HOUSEHOLD GOODS

Packing
Shipping

Rochester "Chief" Rug and Carpet Cleaners

Allen and N. Washington Streets

Members New York and Illinois Furniture Warehousemen's Association

ROCHESTER, N. Y.

Storage, transfer and forwarding of general merchandise. Only warehouse situated in center of city on N. Y. C. R. R. siding. Equipped with sprinkler system. Lowest insurance rates.

MONROE WAREHOUSE CO., INC.,

55-83 Railroad Street

Rochester, N. Y.

ROCHESTER, N. Y.**ROCHESTER CARTING CO.**

Members New York Warehousemen's Association
Distributors of Car Load Freight
Unsurpassed facilities for Storing, Transferring and Forwarding
Merchandise and Household Goods
Two Large Storage Warehouses
162-164 ANDREWS STREET

ROCHESTER, N. Y.**JOSEPH A. SCHANTZ COMPANY**

173-219 CENTRAL AVENUE



We have every facility for handling your Rochester shipments

Two Fireproof Warehouses
Two Non-fireproof Warehouses
Large Fleet of Modern Motor Vans

By mailing your Rochester bills of lading to us you are guaranteeing the most prompt and courteous service to your patrons. You are also protecting your own interests, because we will return all collections promptly and watch the details carefully.

Member of New York Furniture Warehousemen's Ass'n.

SCHENECTADY, N. Y.**SCHENECTADY**

is a natural Distributing Center. We make a specialty of L. C. L. Forwarding and Distribution of Pool Cars.

Two up-to-date Warehouses. Track connections with all Railroads entering City.

Storage of Household Goods, Merchandise, Implements, Yard Storage. Heavy Haulage. Motor Service.

SCHENECTADY STORAGE & TRUCKING COMPANY**SCHENECTADY, N. Y.****W. CADY SMITH**

123 WALL ST.

DISTRIBUTING STORAGE Merchandise RESHIPING PERORDERS

For Wholesalers and Manufacturers.

Moving Safes, Boilers and Heavy Machinery a Specialty.
Household Goods Stored and Shipped. Motor Service.

SYRACUSE, N. Y.

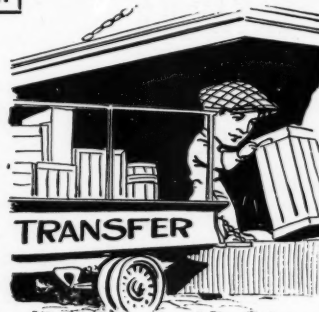
Merchandise
Distribution
Given
Espcial
Attention



Storage of Household Goods, Merchandise and Machinery
**IF YOU WANT REAL SERVICE—TELL ME
YOUR REQUIREMENTS**

**HOOKWAY'S
Storage Warehouse**

725 E. Water St.

SYRACUSE, N. Y.

CONSIGN your Syracuse shipments of merchandise or Household Goods to us. Railroad siding in connection with our warehouse.

Mail bills of lading direct to us. We make no charge for collections and remit promptly.

A big transfer job does not stagger us. We own and operate a fleet of auto trucks to facilitate modern and reliable service.

Yours for Co-operative Service

SYRACUSE FURNITURE & FORWARDING CO., Inc.

270-272 James St., Syracuse, N. Y.

STORAGE PACKING SHIPPERS AGENTS

TROY, N. Y.**EMPIRE STORAGE WAREHOUSES**

TROY, N. Y.

GENERAL STORAGE AND DISTRIBUTING

UTICA, N. Y.

UTICA CARTING & STORAGE COMPANY

Storage, Trucking, Forwarding,
Shipping, Rigging, Transferring,
Distributing, Checking, Packing

MOTOR VANS FOR LONG DISTANCE

Members New York and Illinois Associations.

UTICA, N. Y.

Consign Utica Shipments to JONES-CLARK TRUCKING AND STORAGE CO., Inc.

127-135 Hotel St.

SPECIAL ATTENTION given to Merchandise Distribution and Pool Car Shipments. Storage of Merchandise, Furniture, New Autos and Machinery.

U. S. C. Bonded

Bill Via N. Y. C., D. L. & W., N. Y. O. & W.

CINCINNATI, O.

STORAGE

Fireproof and Non-Fireproof

Business Established in 1867 and built up by

A SERVICE THAT SATISFIES

Prompt Deliveries by Motor
Complete Transfer Facilities

Member
of
New York Furniture
Warehousemen's
Association
and
Illinois Furniture
Warehousemen's
Association



**FRED
PAGELS**

937 West 8th St.

RALEIGH, NORTH CAROLINA

Carolina Storage & Distributing Co.

Raleigh North Carolina

We store, reship and distribute all classes of freight. Modern brick warehouses located on railroad tracks. Pool car distribution a specialty. Being centrally located, reaching a population of over 1,500,000 within a radius of 100 miles, and having excellent railway service, Raleigh is most logical distributing point for this territory.

CANTON, OHIO

CUMMINS STORAGE COMPANY

STORAGE, DRAYING, PACKING AND
FREIGHT HANDLING A SPECIALTY

Unsurpassed Facilities for Handling Pool Cars

310 EAST NINTH STREET

CINCINNATI, OHIO

"STACEY FIRST"



SERVICE
FIREPROOF AND NON-FIRE-
PROOF WAREHOUSES

MODERN MOTOR
VAN EQUIPMENT

RELIABILITY

Established 1891 Investment \$250,000
Your interests carefully protected

STACEY STORAGE CO.

2333 Gilbert Avenue

If the city to which you are shipping is not represented in this list, choose the nearest as the geographical arrangement will help you.

CINCINNATI, OHIO

Do you want to carry a stock of merchandise in Cincinnati? If so, we can look after it for you. Our warehouse is located on the Pennsylvania Railroad. We can reship to Southern points, etc.

The Wallace Transfer & Forwarding Co.
222 & 224 East Front Street

CLEVELAND, OHIO

The Lincoln Fireproof Storage Company

5660-5704 Euclid Avenue
Adjoining Penn. R. R. Euclid Avenue Freight Station and Team Tracks

CLEVELAND, OHIO

SERVICE IS THE THING

For You and Your CLEVELAND Customers

LET US SERVE THEM AS
THEY SHOULD BE SERVED

Our Equipment—Fireproof and Non-Fireproof Storage. Motors and Horse-Drawn Vans.

Our Organization is complete and is more than ample for the largest and most difficult proposition.

We Conserve Your Interests

THE CENTRAL STORAGE WAREHOUSE CO.

1843 East 55th Street
5601 Hough Avenue

CLEVELAND, OHIO

Lake Shore Moving & Storage Co.

844 East 105th Street

Adjacent to the East 105th Street Freight Station of the New York Central Railroad.
Warehouse facilities and economical distribution for the eastern section of Cleveland.

CLEVELAND, OHIO



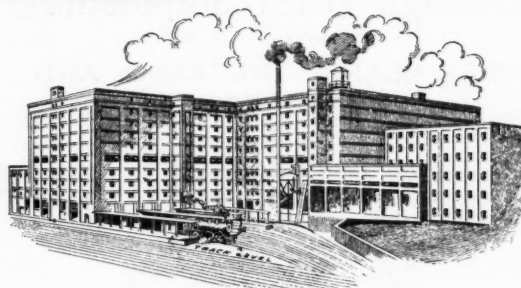
7724 DETROIT AVENUE

CLEVELAND, OHIO

NEAL FIREPROOF STORAGE COMPANY

7208-16 EUCLID AVENUE
Modern Fireproof Buildings Service Complete
Carload Consignments Solicited

CLEVELAND, OHIO



3,000,000 cubic feet General Storage and Leasing Space.

1,250,000 cubic feet Cold Storage Space.

62 Car Capacity at one time.

New, Fire Proof Building

SERVICE

Is all we have to sell.

We solicit your business

Ninth Street Terminal Warehouse Co.

WM. J. HOGAN, President
Cleveland, Ohio

CLEVELAND, OHIO

THE REDHEAD STORAGE CO.

2041 E. 105th STREET

MOTOR VAN SERVICE

Fireproof Warehouse
Household Consignments Solicited
Satisfactory Service Assured

Members I. F. W. A.

N. Y. F. W. A.

COLUMBUS, OHIO

THERE IS
NOTHING TOO LARGE
NOR TOO SMALL
FOR US TO HANDLE

THE BUCKEYE TRANSFER & STORAGE COMPANY

COLUMBUS, OHIO

Safety First

The Fireproof Warehouse & Storage Company

1018-30 North High Street
Columbus, Ohio

TRANSFERRING — STORING — PACKING

We have one of the finest warehouse plants in the state; being steam heated throughout, equipped with a sprinkler system, absolutely fireproof. The cheapest rate of insurance. Located handy to all railroads, we are able to deliver the best service obtainable anywhere. We solicit your shipments to our city and assure you we will reciprocate. P. A. DOLLE, General Manager.

Motor Truck Service

Vaults for Valuables

Private Rooms

SANDUSKY, OHIO

The Island & Terminal Transfer Co.

JOHN A. MILLOTT, MGR.

TRANSFER, DRAYAGE and STORAGE
New Three-story Fireproof Building, also Non-fireproof Buildings

MERCHANDISE AND HOUSEHOLD GOODS
Complete Distributing Facilities Steamboat Landing and Railroad Siding

SPRINGFIELD, OHIO

Bill All Shipments for Springfield, Ohio, to

WAGNER FIREPROOF STORAGE & TRUCK CO.

Siding on Pennsylvania Lines

Complete Facilities for Distribution of Pool Car Shipments
Moving—Packing—Shipping—Storing
Household Goods and Merchandise

COLUMBUS, OHIO

THE KUTSCHBACH-McNALLY Co.

Complete Facilities for Storing and Forwarding
HOUSEHOLD GOODS and MERCHANDISE

Siding on Pennsylvania Tracks

Manufacturers' Distributors MOTOR Equipment
Member Interstate Warehousemen's Association

TOLEDO, OHIO

DEPENTHAL TRUCK & STORAGE COMPANY

108 SUMMIT STREET

Member of New York, Illinois, and Southern Furniture
Warehousemen's Associations

COLUMBUS, O.

The Merchandise Storage Co.

Distributing & Warehousing Merchandise Only

Located on Big 4 Tracks

W. W. FAIRCHILD, Mgr.

Office and Warehouse, 33 Vine St.

TOLEDO, OHIO

THE TOLEDO MERCHANTS' DELIVERY COMPANY

128 SUMMIT STREET

AUTO SERVICE—FIREPROOF STORAGE

Household Goods and Automobiles Moved, Packed, Shipped and
Stored. Safes, Boilers, Machinery and Smokestacks Moved.

100% SERVICE

Reference: Second National Bank, or any bank in Toledo

DAYTON, OHIO

THE LINCOLN STORAGE CO.

"Fireproof"

BIG 4 TRACK IN BUILDING. Members N. Y. & I. F. W. A.

313-315 EAST FIRST STREET

A. B. Compton, Vice-President

DAYTON, OHIO

THE UNION STORAGE CO.

U. S. BONDED

BAINBRIDGE, BACON & STATE STREETS

MERCHANDISE STORAGE TRANSFER DISTRIBUTION

YOUNGSTOWN, OHIO



Local and Long Distance Hauling
Manufacturers' Distributors Carload Distribution

MANSFIELD, OHIO

THE COTTER TRANSFER AND STORAGE CO.

FIREPROOF AND NON-FIREPROOF
WAREHOUSES

Furniture and Merchandise Storage

Motor Trucks Heavy Hauling Distributing

The Cotter System

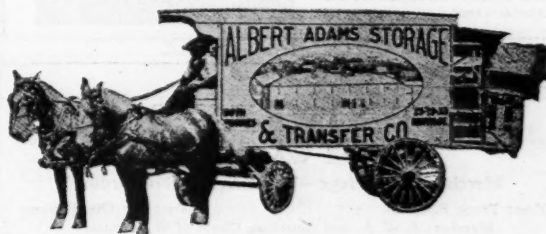
Members New York, Illinois and American Warehousemen's Assns.

ZANESVILLE, OHIO

ALBERT ADAMS STORAGE AND TRANSFER CO.

25-29-33 Ninth St.

Merchandise and Household Goods Carload Distribution
Manufacturers' Distributors 50,000 Square Feet of Floor Space



OKLAHOMA CITY, OKLA.

Fireproof
Warehouses for
Household
Goods and
Merchandise.

Members of I. F. W. A.,
New York, American
Chain, Central, South-
ern, Pacific Coast
Warehousemen's Asso-
ciation.



O.K. TRANSFER & STORAGE CO.

A. C. WEICKER, President

HARRISBURG, PA.

Pool Cars

Received-Checked-Distributed
and

Forwarded in Less Than Car Lots

Penna. RR Siding Harrisburg Storage Co.
Harrisburg, Pa.

CLINTON, OKLA.

100 miles from any other jobbing center

MANUFACTURERS

Should investigate Western Oklahoma territory.
No better point for distribution.
No better facilities than ours.

GOODNER-KRUMM-FARR CO.
All Kinds Transfer and Storage

LANCASTER, PA.

KEYSTONE STORAGE COMPANY

STORAGE—DISTRIBUTORS—FORWARDERS
Merchandise and Household Goods

MANUFACTURERS' DISTRIBUTORS MOTOR SERVICE
Siding on P. R. R. and P. & R.

TULSA, OKLA.

Tulsa Warehouse Company

Inc. \$200,000

Our business is your business in Tulsa.
We store your merchandise.
We look after your shipments.
We collect your drafts and accounts.
We distribute your samples.
We make you reliable credit reports.
We trace your cars and save you demurrage.
We furnish offices for rent to our patrons.
We loan you money on your warehouse receipts.
We give you real service promptly.
If there is anything else we can do for you, our services
are at your command.

ORRA E. UPP, President and Manager.

OIL CITY, PA.

CARNAHAN
TRANSFER & STORAGE COMPANY

R. C. LAY, Proprietor

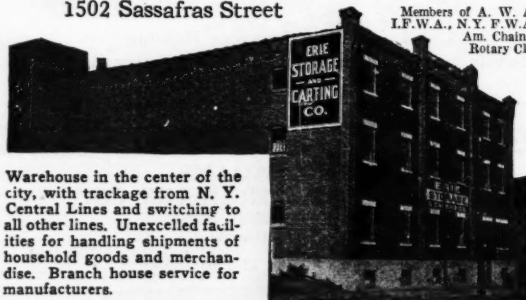
Piano Moving a Specialty
Distributing and Forwarding Agents; Packing
Fireproof Warehouse

ERIE, PA.

ERIE
STORAGE & CARTING COMPANY

1502 Sassafras Street

Members of A. W. A.,
I. F. W. A., N. Y. F. W. A.,
Am. Chain &
Rotary Club



Warehouse in the center of the
city, with trackage from N. Y.
Central Lines and switching to
all other lines. Unexcelled facil-
ities for handling shipments of
household goods and merchan-
dise. Branch house service for
manufacturers.

HARRISBURG, PA.

MONTGOMERY & CO.
STORAGE WAREHOUSES

Merchandise Storage—Transferring—Forwarding
Direct Track Facilities Pool Car Distribution
Members A. W. A. and American Chain of Warehouses

PHILADELPHIA, PA.

ATLAS
STORAGE WAREHOUSE

Office and Warehouse:
Market and Thirty-sev-
enth Streets,
Philadelphia, Pa.

Member Pennsylvania,
New York, Illinois,
and Southern Furniture
Warehousemen's Asso-
ciations

Service is the measure of the difference between good
work and poor.

Service of the right sort in the storage, moving, pack-
ing and shipping of household goods and office fur-
nishings exclusively, constitutes our business.

As it relates to shipments consigned to us, we inter-
pret service to require safeguarding the interests of the
shipping warehouse, prompt remittance of collections,
fair charges and treatment to customers, and to all—
courtesy.

We solicit your Philadelphia shipments.

For West Philadelphia and general city delivery con-
sign C. L. and E. C. L. shipments—P. R. R. 36th
and Market Sts. Station; B. & O. E. R. 24th and
Race Sts. Station; P. & R. Rwy. 23rd and Arch Sts.
Station.

PHILADELPHIA, PA.

We Stand for a Square Deal

**International Warehousing Co.
General Storage**

Delaware Ave., Queen and Swanson St.

Forwarding & Distributing

P. R. R. Siding

PHILADELPHIA, PA.

Established 1883

**Merchants' Parcel
Delivery Co.**

1132-34 Race St., Philadelphia, Pa.

Deliver in Philadelphia and Camden, N. J.

Special Prices on Samples, Advertising Matter, Calendars and Publications

PHILADELPHIA, PA.



Our large fleet of motor trucks enables us to render quick and efficient service to your patrons.

We are accessible to all depots and suburbs of our city. Our warehouses are within two blocks of North Philadelphia Station of the Pennsylvania Railroad and the 12th and York Streets Station of the Philadelphia & Reading or the Baltimore & Ohio.

Collections through our office will assure prompt returns.

Fireproof and Non-Fireproof Warehouses

Miller North Broad Storage Co.

2709-2721 North Broad Street

PHILADELPHIA, PA.

OUR HOBBY

is the distribution of goods for
National Merchandisers

North Philadelphia Storage Co., Inc.
SHIBE BALL PARK

PHILADELPHIA, PA.

PENN

STORAGE & VAN COMPANY

2136 MARKET STREET

"Let Wightman do it"

PHILADELPHIA, PA.

Established 1884

The SAFETY STORAGE VAN & PACKING CO.
3712-3714 Market Street

Motor Truck Moving - Storage - Domestic and Foreign Packing

PHILADELPHIA, PA.

**Columbia Ave. Storage
Company**

1511 to 1519 Columbia Avenue

**EXCLUSIVELY HOUSEHOLD
GOODS**

Motor Equipment

Moving Packing Shipping

Operated by the

**TERMINAL WAREHOUSE AND
TRANSFER CO.**

Delaware Avenue and Green Street

GENERAL MERCHANDISE

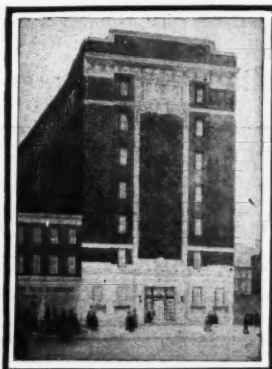
Forwarding and Distributing

9 Warehouses. 16 Acres of Floor Space. Trackage
Facilities for 17 Cars.

Members { American Warehousemen's Association
 { American Chain of Warehouses

If the City to which you are shipping is not represented in this list, choose the nearest as the geographical arrangement will help you.

PHILADELPHIA, PA.



20th CENTURY

THE LAST WORD IN WAREHOUSES

A solid concrete building. Best location in Philadelphia. A fleet of Pierce Arrow enclosed vans. We operate a large garage adjoining our warehouse capable of accommodating the largest van built. Try us when your van is in Philadelphia. All collections through our office promptly remitted. Members New York Warehousemen's Association and Pennsylvania Warehousemen's Association.

20th CENTURY STORAGE WAREHOUSE CO.

3120-22-24-26-28-30 MARKET STREET
(Opposite West Philadelphia Station P. R. R.)

PITTSBURGH, PA.

SERVICE TO THE CORRESPONDENT



CONSISTS in giving the correspondence of those we represent prompt acknowledgment, safeguarding their interests, mailing checks in settlement of accounts, and furnishing final reports of transactions.



THIS service also includes an element of importance:— the handling of shipments upon arrival in a manner conducive to joint customer's approval, whose future business we are always eager to secure.



Ship via Pennsylvania to East Liberty Station, (Pittsburgh, Pa.)

Established 1889

HAUGH & KEENAN
STORAGE AND TRANSFER CO.
CENTRE AND EUCLID AVENUES

PITTSBURGH, PA.



Fireproof
I will grow four
more stories



Garage & Stables

BLANCK'S Transfer & Storage Co.

Moving, Packing and Storage
MOTOR TRUCK SERVICE—SEPARATE ROOMS FOR STORAGE



Fireproof

6344

Penn
Ave.

E E



Fireproof

PITTSBURGH, PA.

HOEVELER WAREHOUSE COMPANY

MOVERS AND STORERS

750 MILLVALE AVENUE

PITTSBURGH, PA.

MURDOCH

STORAGE & TRANSFER COMPANY

General Office, and Warehouses

546 NEVILLE STREET
PITTSBURGH, PA.

Branch Warehouse, Wilksburg, Pa.

Murdoch Means Service

PITTSBURGH, PA.

HASLEY BROTHERS TRANSFER AND STORAGE

939 So. Canal St., N. S.

MOVERS, PACKERS, SHIPPERS OF HOUSEHOLD GOODS
FIRE PROTECTED STORAGE—MEMBERS A. W. A.

PITTSBURGH, PA.

Oakland Ex. & Transfer Co.

Packers, Storers and Shippers of

HOUSEHOLD GOODS

229 ATWOOD STREET

PITTSBURGH, PA.

J. O'NEIL EXPRESS & STORAGE

N. S. PITTSBURGH, PENNA.

Furniture and Piano Moving a Specialty. General Hauling.

NEW FIREPROOF STORAGE HOUSE
Separate Rooms

SCRANTON, PA.

"The World Moves—So Does Post"

R. F. POST

ESTATE

44 LACKAWANNA AVENUE

Freight, Furniture, Pianos, Safes, Machinery, Boilers, Stacks, etc.
DRAYMAN, RIGGER, AND WAREHOUSE

PITTSBURGH, PA.

SHIP YOUR CARS TO US FOR DISTRIBUTION**Pool Cars**Received, Checked, Distributed
Reshipped in Less Than Car Lots**Pittsburg Distributing Co.**708 Duquesne Way
Pittsburg, Pa.

SCRANTON, PA.

WILKES-BARRE, PA.

Established 1894.

"He Profits Most Who Serves Best"

(Rotary)

**The Quackenbush
Warehouse Co.**

Incorporated

Warehousing of every description. Storing, Packing
Carting, Shipping. R.R. Siding. Manufacturers
Distributors

Correspondence Solicited

Wilkes-Barre, Pa.

Scranton, Pa.

PITTSBURGH, PA.

**WEBER
EXPRESS & STORAGE COMPANY**

GENERAL HAULING

Moving, Packing and Storing of Furniture and Pianos

4620 HENRY STREET

PROVIDENCE, R. I.

CADY MOVING & STORAGE CO.

STORAGE WAREHOUSES

Household Furniture and Pianos

Packing, Crating and Shipping.

62 to 70 Dudley Street.

PITTSBURGH, PA.

Building 100 x 125—8 Stories Front
9 Stories Rear—Garage in Basement—Just Completed**Shanahan
Transfer & Storage Company**

Fireproof Storage for Household Goods.

All Separate—1200 Fireproof Rooms.

Furniture Moved and Packed for Shipment.

Motor Vans, Trucks. Special Heated Piano Floor

Fifth Ave. at McKee Place

(Next Door to You)

Established 1865.

Over 50 Years

NASHVILLE, TENN.

E. M. BOND**FIREPROOF STORAGE CO.**

HOUSEHOLD GOODS AND MERCHANDISE

Modern Fireproof Building

Private Siding With All Rail Connections.

CHATTANOOGA, TENN.

**THE CHATTANOOGA
TRANSFER & STORAGE CO.**

Fireproof Warehouse

Furniture

Merchandise

Packed Stored Shipped

Heavy Hauling

Motor and Horse Drawn Equipment

EL PASO, TEXAS

**WESTERN
TRANSFER & STORAGE COMPANY**

220-26 S. STANTON STREET

ONLY FIREPROOF STORAGE IN EL PASO

Forwarders and Distributors—Trucking of all kinds—Distribution
Cars a specialty—Warehouse on Track

DALLAS, TEXAS

CARLOAD DISTRIBUTION & STORAGE

Merchandise and Household Goods

The Inter-State
Forwarding Co.

Cor. Elm & Jefferson St.
The Center of the Wholesale District

120,000 Sq. Ft. T. & P. R. R. Capacity Un-
loading 12 Cars Per Day.

Maintains an organization for service in all branches of
Warehousing and Distribution

W. J. FORD and R. E. EAGON,
Associate Manager

FORT WORTH, TEXAS

Fort Worth Ware-
house & Storage Co.

INCORPORATED

Merchandise Distribution, General Storage
Manufacturers' Representative

PRIVATE SIDING WITH ALL RAIL
CONNECTIONS

Fort Worth with its seventeen railways is the logical
distributing center for Texas and the Southwest.

Absolutely Fireproof Warehouses

BEAUMONT, TEXAS

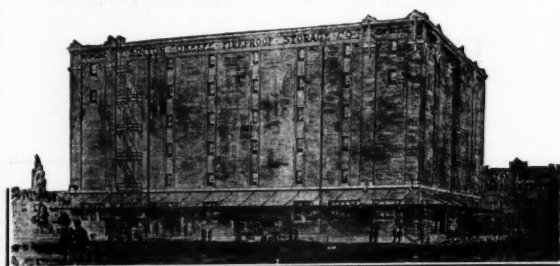
BEAUMONT BONDED
WAREHOUSE CO.

WE DO POOL CAR DISTRIBUTING, MOVING, PACKING,
SHIPPING AND STORAGE.

Long distance hauling by Motor Trucks. 50,000 feet
storage space. R. R. track in building—no charges for
switching.

BEAUMONT, TEXAS

FORT WORTH, TEXAS

Binyon-O'Keefe
Fireproof Storage Company

Est. 1875

Your consignments to Fort Worth
will receive intelligent service. We
have a siding on the Rock Island Rail-
road with free switching from all lines.
Fireproof warehouse, 90,000 sq. ft.,
yard storage, factory distributors.

Members of

Illinois Furniture Warehousemen's Association
Southern Furniture Warehousemen's Association
Central Warehousemen's Association

SAN ANTONIO, TEX.

Established 1880

FREIGHT

AUTO SERVICE

STORAGE

OFFICIAL DISTRIBUTORS
MERCHANTS' TRANSFER CO.

SAFETY

COURTESY

SERVICE

WACO, TEXAS

MASON

TRANSFER & STORAGE COMPANY

217-219 JACKSON STREET

Merchandise Storage, Forwarders & Distribution Truck-
ing of all kinds. Warehouse on track. 7 Denby Trucks

WACO, TEXAS**Weathered Transfer and Storage Co., Inc.**

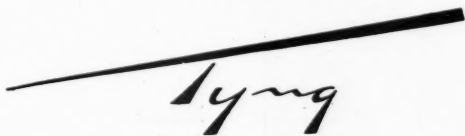
Modern Warehouse Facilities—Trackage on all roads

100,000 SQUARE FEET STORAGE SPACE

We do pool car distributing, moving, packing, shipping, storage, long distance hauling by trucks.

ALT LAKE CITY, UTAH

SALT LAKE CITY IS A

NATURAL DISTRIBUTING CENTERWe Make a Specialty
of Carload Distribution**Warehouse and Storage Company****MERCHANDISE WAREHOUSING AND
DISTRIBUTION
COLD STORAGE**

Served by all railroads

Salt Lake City, Utah

142,000 Square Feet of Floor Space

PETERSBURG, VA.**Southern Bonded Warehouse Corp.**

BONDED STORAGE

Distributors Motor Truck Service
Private Railroad Sidings

Our Negotiable Receipts Acceptable at all Banks

SEATTLE, WASH.**United Warehouse Company
SEATTLE, WASH.**

Established 1895

GENERAL STORAGE AND DISTRIBUTING

SPOKANE, WASH.**McAllister Warehouse Company**

W. E. Burke, Manager

More than a Warehouse—we are your personal representatives, carrying out your policies. Carloads are received, stored and distributed in Spokane for local and Inland Empire customers. Office facilities for handling your trade are at your disposal.

We have grown with Spokane; let your account grow with us.

TACOMA, WASH.**COMMERCIAL TRUCK &
STORAGE CO.****WE OWN BOTH WAREHOUSES**

Established 20 years in Tacoma—and know how to handle your requirements

Storage (bonded and free) Merchandise and H. H. Goods

Moving and Packing by Experts C. L. & L. C. L. Distribution

Collections Remitted Promptly

We Solicit Your Business

TACOMA, WASH.**PACIFIC STORAGE and
TRANSFER CO., Inc.**

Merchandise and Furniture Storage

Distributors and Forwarders

Merchandise and Furniture

SEND YOUR POOL CARS IN OUR CARE

Auto Truck and Transfer Service



N. P. RY. SIDE TRACKS

BROADWAY AND 17th STREET

YAKIMA, WASH.**MILLER & LENINGTON**

CONTRACTORS

DISTRIBUTING and FORWARDING AGENTS

[TRANSFER—STORAGE—WAREHOUSING]

Motor Trucks and Team Equipment for All and Every Kind of
HaulingSHIP IN OUR CARE and let us be "At your service with best
of service"

Office: 10 East A Street

Sidney Hotel Bldg.

'Phone 571

YAKIMA, WASH.

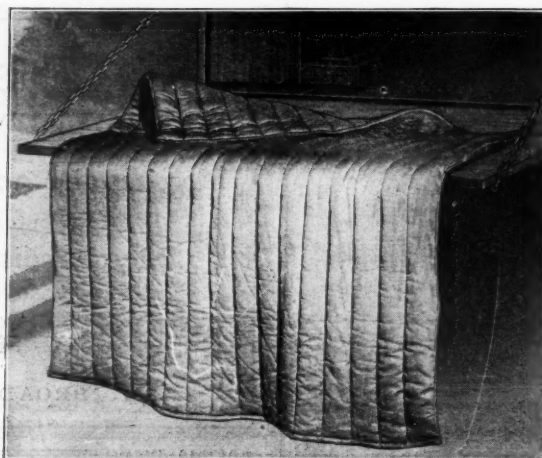
J. J. CRAWFORD, PRES.

E. NORTON, SEC

**YAKIMA TRANSFER &
STORAGE CO.**Office and general storage warehouse No. 25 North Front,
directly opposite Northern Pacific passenger station.22,000 square feet of compartment storage for household
goods, pianos etc.Track warehouse No. 11 South First Ave, 30,000 square
feet of floor space devoted exclusively to the storage of mer-
chandise. Every facility for clean, economical, storage and
handling of commercial accounts.

Auto trucks and teams.

Maish Quality Wagon Pads



Khaki
Brown

Means
Service

Give 100% Service

If you judge wagon pads by the service they give, your choice must be Maish Quality Wagon Pads. Put to the test of usage and rough handling, they registered a perfect score. You get the benefits that come when quality and economy are combined. Maish Quality Wagon Pads are shipped on a guarantee that permits you to return them at our expense if you are not more than pleased.

We use an exceptionally heavy grade of khaki brown covering in making the new Maish Quality Wagon Pads, believing the trade demands an article that is substantial and wear-resisting. Filling is an extra thick one-piece layer of cotton (no shoddy). Quilting in close rows of stitching with heavy carpet thread. Edges bound by our own special process to protect every seam and prevent ripping.

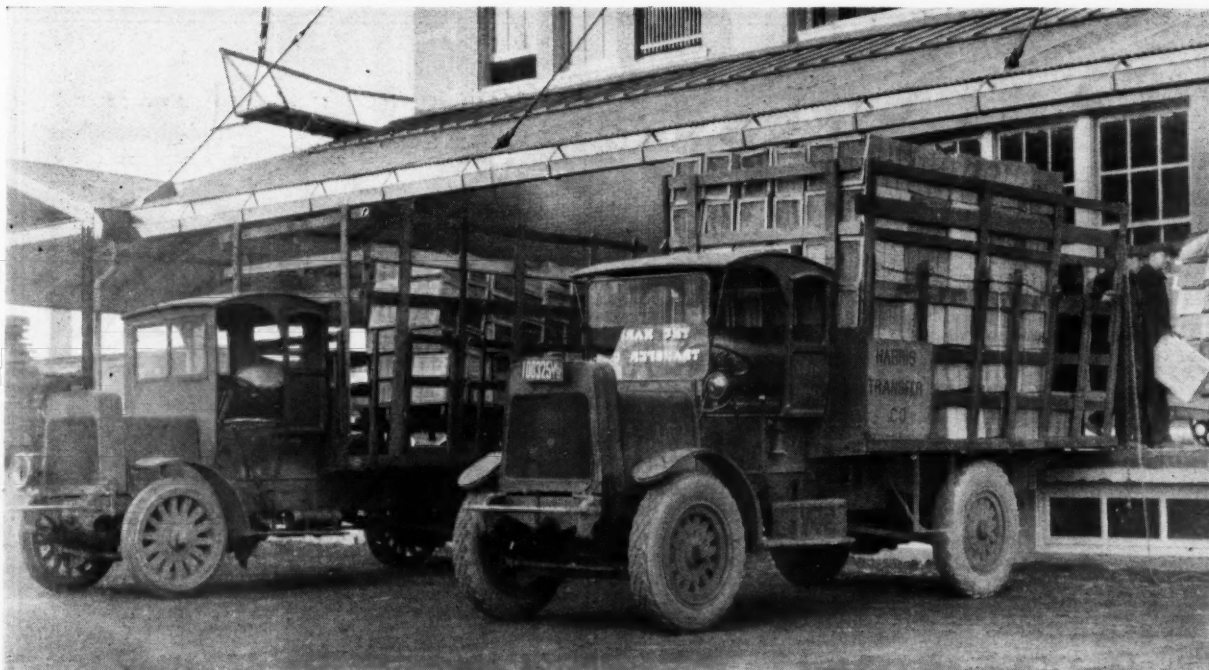
Immediate deliveries in these standard sizes:

No. 10 Cut Size, 36x72
No. 20 Cut Size, 54x72
No. 30 Cut Size, 72x80

The Chas. A. Maish Co.

Cincinnati, O.

Makers of the world famous Maish Comforts, 1127-1145 Bank Street



Copyright 1920, by The Goodyear Tire & Rubber Co., Akron, O.

Pneumatics Hauled for Less In This Transportation Test

On September 30, 1919, The Harris Transfer Company, Hauling Contractors of Indianapolis, concluded a six months' test of solid versus pneumatic truck tires. The two trucks employed, No. 6 and No. 7, were of the same make, capacity, and service life. They had been built at about the same time, being separated by only eight serial engine numbers. The results of this extended comparison of solid and pneumatic tires show why The Harris Transfer Company intends to specify pneumatics when purchasing new trucks.

	Truck No. 6 (Completely equipped with solid tires)	Truck No. 7 (Completely equipped with Goodyear Cord Tires)	Savings effected by Goodyear Cord Tires
Miles Traveled.....	3,842.7	3,870.5	Mileage figures governed by service conditions
Gallons of Gasoline.....	804	546	32% saving
Pints of Cylinder Oil.....	122	50	59% saving
Repairs (per mile).....	\$0.0035	\$0.0002	92% saving
Operating Cost (per mile).....	.344	.316	8% saving

NOTE: Mileages of Goodyear Cord Tires on Truck No. 7 average 13,500 to date, all remaining in sound condition. One rear has traveled 18,000 miles, remaining serviceable.

Further operating and cost data, bearing on the use of pneumatic truck tires in your business, may be obtained by writing to The Goodyear Tire & Rubber Company, at Akron, Ohio.



GOODYEAR

The National Motor Truck Shows

And Highway Transport Conferences

Under Auspices of National Automobile Chamber of Commerce, Inc.

**January 3—10
AT NEW YORK**

8th Coast Artillery Armory

Take 6th or 9th Avenue L or Lexington Ave. Subway directly to Armory

**January 24—31
AT CHICAGO**

International Ampitheatre

Take South Side L. Directly to the Building

A comprehensive display by all leading manufacturers, filling the largest exposition building in each city. Lectures—discussions—moving pictures—demonstrations of truck use and economy.

S. A. MILES, Manager

7 East 42nd Street, New York

HIGHWAYS OF INDUSTRY

**No Blockades
No Lost Time
No Wages
for Truckers
No Breakages**

UP, down, through walls, along narrow passages, over roofs,—everywhere these highways of industry go. Without blockades, demanding nothing as a salary, needing practically no attention, Alvey-Ferguson Conveyors handle transporting problems in a way impossible when truckers are employed.

Using Gravity, a now wasted source of power,—delivering at machines, loading platforms, or store rooms, in a steady unbroken stream, this method of moving materials, parts and products establishes a dependable operating efficiency obtainable in no other way.

The Alvey-Ferguson Engineering Service Bureau has been organized to cooperate in studying your conveying requirements. Using the services of these experts places you under no obligation. It does place you in a position to obtain facts of extreme value.

The Alvey-Ferguson Co., Inc.
Cincinnati Ohio



Save Time, Money and Labor in Handling and Hauling Freight

The present period of business readjustment and labor problems is the time of all times for the institution of true haulage economy and efficiency.

Progressive manufacturers and industries—everywhere—are finding that handling all kinds of material by electric power is more economical than hand trucking.

General speeding up, increased production and labor savings are but a few advantages of

INDUSTRIAL TRUCKS AND TRACTORS EQUIPPED WITH Edison Storage Batteries

Edison Batteries are the standard for Truck and Tractor Service—because—they give sure, dependable service year in and year out.

Edison Batteries are the **only** storage batteries with **steel** and **iron** in their construction and elements; a sure guarantee of strength and power combined with lowest maintenance costs.

Our bulletin 600-B shows what Edison Storage Batteries have done to secure industrial efficiency with Trucks and Tractors. A copy on request

Edison Storage Battery Co.

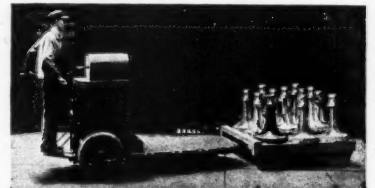
Factory and Main Office: Orange, N. J.

DISTRIBUTORS IN

New York	Boston	Chicago	Detroit	Cleveland	Seattle	San Francisco
Denver	Los Angeles	New Orleans	Kansas City	Atlanta		
Washington	Scranton	Pittsburgh	Philadelphia	Syracuse	New Haven	



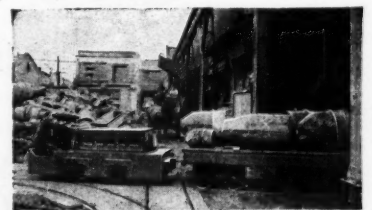
Handling lumber at a railroad siding.



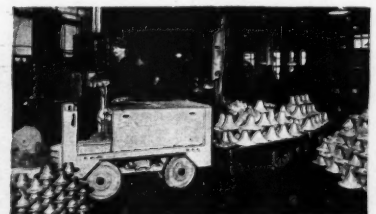
Handling large numbers of heavy pieces.



This is one of 4 Edison-equipped tractors that replaced 65 men and increased work from 25 to 40 cars loaded daily.



The storage battery locomotive finds many uses in foundries, shops, yards, etc. It is labor-saving and efficient, keeps materials moving.



Moving small pieces in the machine shop



Here Is One Man Doing the Work of 15

The picture in the circle shows **THREE** men moving a load of **FIVE** full sacks with a hand truck.

In the other picture **ONE** man is moving 25 of these bags in one trip with a Lakewood Model "B" Storage Battery Truck—and doing it quicker.

How long before such a saving in men and time will more than repay the cost of the storage battery truck?

Similar savings are possible in industrial plants where Lakewood Tractor and Trailer Haulage best meets conditions.

In some cases one tractor and a few trailers will do the work of 20 or more men. The saving depends on how well the haulage system is planned to link up with your manufacturing plan.

You can cut costs and increase production with a power haulage system. Why not let a Lakewood Engineer help estimate what a Lakewood Haulage System will do for you? No obligation on your part at all.

Descriptive Bulletins on request describing Lakewood Electric Locomotives, Industrial Cars, Track, Tractors, Trailers and Trucks.



THE LAKEWOOD ENGINEERING COMPANY
CLEVELAND, U. S. A.

Offices in New York, Boston, Philadelphia, Atlanta, Washington, Pittsburgh, Detroit, Chicago, Milwaukee, Salt Lake City, Los Angeles, Seattle, Kansas City, Oklahoma City, San Francisco and Dallas

Lakewood Industrial Haulage

FLAT WHEEL.

FLANGE WHEEL.

ALMACOA

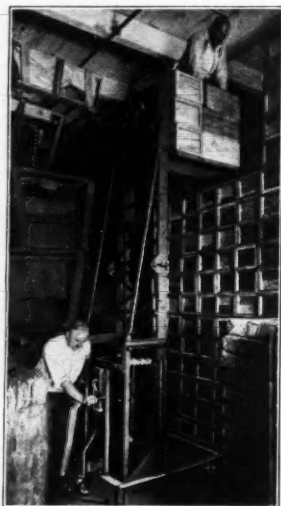
EXPORT DEPARTMENT

ALLIED MACHINERY COMPANY OF AMERICA

51 CHAMBERS ST. NEW YORK U.S.A. CABLES ALMACOA NEW YORK

ALMACOA

Adding Floor Space to Your Warehouse—



By using the Hand-I-lift you not only utilize space near the ceiling that has been going to waste because you could not fill it by back-breaking, strong-arm methods—but you won't waste money-making floor space on "lifts" which require a wide space in which to swing the platform to position.

The Hand-I-lift does not require "jockeying around." It unloads easily from any of the three sides of the platform—not only from the front, as in other types.

The "hinged" upright frame permits the Hand-I-lift to pass through low doorways or under obstructions—easy-rolling wheels make it easy to truck heavy loads to the tiering point—and special feet make "skidding" from under the load impossible.

And as a labor-saver—one or two men with the Hand-I-lift can stack as much goods as three to six men without it, and do it quicker and cheaper.

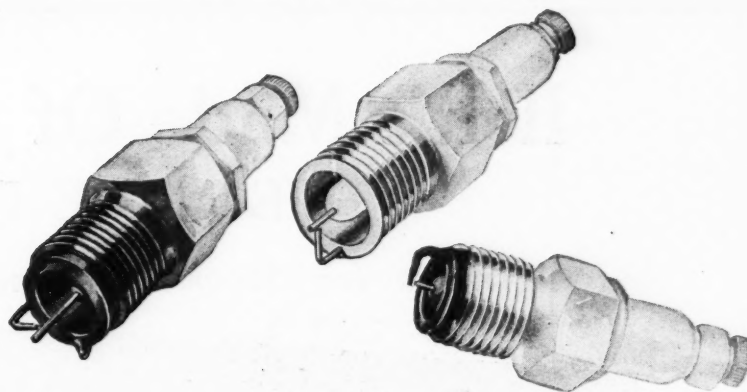
BROWN - PORTABLE
HAND-I-LIFT
"LOWERS THE COST OF LIFTING."

A request on
your stationery
will bring you
our booklets!

Brown Portable Conveying Machinery Co.

10 S. La Salle St.
Chicago

30 Church St.
New York City



Inlands and the spark plug test

The owner of an Inland-equipped truck reads the results of the Inland spiral cut every time he looks at his spark plugs.

If the carburetion is perfect and there is no oil leaking through, there will be only a light, reddish tinge on the porcelain of the plug.

If the carburetion is poor, there will also be a dry, flaky soot caused by surplus of carbon.

But, unless the cylinders are scored, there will be no black, greasy gum from the leakage of oil.

The Inland spiral cut makes possible a one-piece piston ring—a ring that is gas-tight and oil-tight.

Its tension not only holds it together as a solid unit on the piston but also insures a snug fit against the cylinder walls.

If you find your spark plugs covered with a black, greasy gum, look to your piston rings.

Samples on request to dealers, importers, wholesalers and manufacturers.

Inland Machine Works

1672 Locust St.

St. Louis, Mo.



INLAND

ONE-PIECE PISTON RING

If It's Made Of Canvas WE MAKE IT

Write for Stock List and Catalog



Waterproof Storm Covers

For Auto Trucks, Wagons and
Horses Tarpaulins

Dust Covers, Piano Covers,

Victrola Covers, Tents,

Horse Feed Bags, Radiator

and Hood Covers, Furniture

Loading Pads, Van Liner

Pads, Canvas Pads and

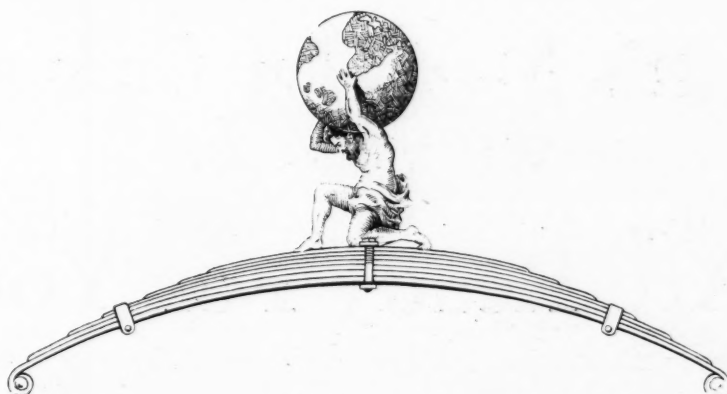
Bags of Every Description.

Large Stock—Prompt Deliveries

RICHARDS MFG. CORPORATION

Philadelphia, Pa.

MAIN OFFICE AND FACTORY: 948-952 NORTH 8th STREET



The Spring That's Built for Emergencies

ORDINARY springs may be good enough for ordinary trucking conditions. But just as you need reserve power to climb a long grade so do you need reserve spring strength to take the terrific thrusts that unforeseen bumps or unavoidable holes in the road may subject your springs to.

Harvey Springs are built for emergencies, built so you can trust them under any and all conditions. They are boltless, carefully designed throughout for great strength, non-sagging, guaranteed. A real engineering achievement.

No matter what make or model of truck you operate, there's a Harvey Spring specially designed for it. Any Harvey dealer can supply you. Write us now for the name of the one nearest you. Then you'll know where to go when you need Harvey Help.



Harvey Spring & Forging Co.,
1121 17th Street, Racine, Wis.



Are Ready For You



The Keystone Canvas Goods and Flag Company is ready to serve you with the best products made.

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KEYSTONE WATER PROOF STORM COVERS

For motor trucks, wagons and horses have the ace-high quality that makes them dependable defense against weather's ravages. Radiator and Hood Covers suited to any need you may have are part of the Keystone line. Write us about your particular needs. Other Keystone quality products you should know and use are:

Coal Sacks
 Horse Covers
 Van and Loading Pads
 Tarpaulins
 Victrola Covers

Mailing Sacks
 Piano Covers
 Dust Covers
 Caster Bags
 Oil Skin Cloths

KEYSTONE CANVAS GOODS & FLAG CO.

1012-1018 Filbert St.

Philadelphia, Pa.

Prompt deliveries assured. Prices on all these products are **right prices**. There is a Keystone service station near you. Write us for quotations in your vicinity.

KEYSTONE COVERINGS

"Horse Sense"



Study the Traffic's specifications, and consider the price, then you'll have the reason why the Traffic is giving satisfaction and making money for owners and dealers.



The sun never sets on the Traffic—they are in operation in all corners of the earth.



There are over 80,000 motor trucks in use today on farms, with sales in sight this year for nearly 300,000 more. Under the present speed of progress the farmers alone offer a market right now for 1,500,000 additional trucks. It is estimated that 3,000,000 users of trucks conservatively represents the total market in the field of agriculture.



The Traffic is the lowest priced 4,000-lb. capacity truck in the world. Built standardized units.



Traffic Specifications:

Red Seal Continental $3\frac{3}{4} \times 5$ motor; Covert transmission; multiple disc clutch; Bosch magneto; Carter carburetor; 4-piece cast shell, cellular type radiator; drop forged front axle with Timken roller bearings; Russel rear axle, internal gear, roller bearings; semi-elliptic front and rear springs; 6-inch U-channel frame; Standard Fish tires, $34 \times 3\frac{1}{2}$ front, 34×5 rear; 133-inch wheelbase; 122-inch length of frame behind driver's seat; oil cup lubricating system; chassis painted, striped and varnished; driver's lazy-back seat and cushion regular equipment. Pneumatic cord tire equipment at extra cost.

Chassis \$1395 Factory



Notice to Dealers

It is Traffic policy to make direct connections in every city, town and village throughout the United States. Wire for territory you want and if open come to the factory and see the Traffic produced and perform.



The Traffic is produced by the largest exclusive builders of 4,000-lb. capacity trucks in the world.



Traffic Truck

4,000 LBS. CAPACITY

Making Good in Hard Service \$1395

Read This Letter



St. Louis, Mo., June 18th, 1919.

Traffic Motor Truck Corporation,
5200 North Second Street, St. Louis, Mo.
Gentlemen:

Please have your representative call and see me at once in regard to increasing our fleet of TRAFFIC TRUCKS.

We are more than pleased with our present TRAFFIC TRUCK equipment and have decided to replace all our old truck equipment with TRAFFICS.

For your information, wish to advise that our TRAFFIC TRUCKS, some of which are almost two years old, are running 24 hours a day every day in the year and are averaging a little better than 12 miles to a gallon of gasoline, have a wonderful amount of power and are giving very satisfactory service.

Very truly yours,

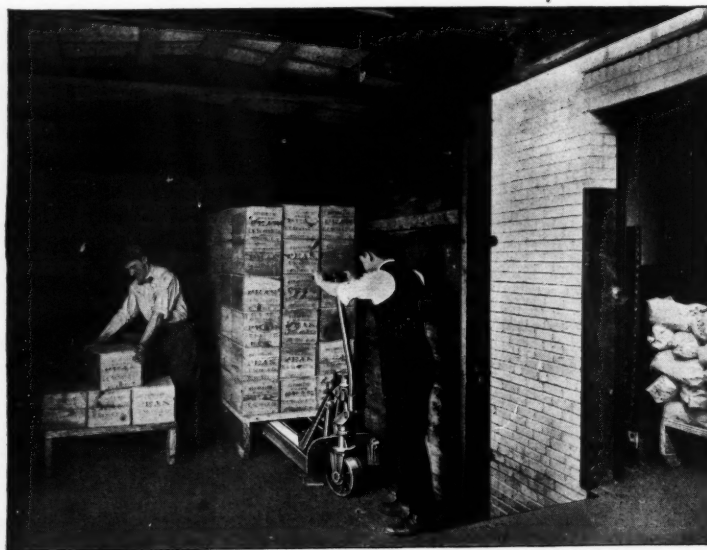
POPULAR PRICE EXPRESS CO.,

(Signed) Chas. E. Jones, President and Manager.

The Popular Price Express Co. is one of the largest and most successful independent express companies in St. Louis operating a large fleet of Motor trucks for general transfer and express work.

Traffic Motor Truck Corporation, St. Louis, U. S. A.

Largest Exclusive Builders of 4000-Lb. Capacity Trucks in the World.



Freight Handlers for Ten Cents an Hour

That is what it means to use the platform system and Jacklifts, because one man does the work of four.

Stop loading and unloading your unit shipments. Load them right from the car onto cheap wooden platforms and move them with **one** man and the Jacklift right into the house. Leave them on platforms. The Jacklift gives wheels to the platform, load and all, at any time, instantly. Two men unload a carload in an hour.

Unload your cases, pails, bags, tires, or a hundred and one things in this way. If you want to pile to the ceiling, do it just the same. You can move the lower half of the load instantly without rehandling anyway.

You can unload cars with the Jacklift and onto and off of your elevators **because it lifts high enough**. It lifts six inches if you need it. Also note its other advantages.

We can't imagine your not wanting to look into this right now. You are paying for Jacklifts many times over if you are not using them.

Here are a few of the warehouses who do use them. Ask them what they think of the Jacklift:

Security Warehouse Co., Minneapolis; Savannah Bonded Warehouse & Transfer Co., Savannah, Ga.; Indianapolis Warehouse Co., and the Tripp Warehouse Co., both Indianapolis, Ind.; Merchants' Cold Storage & Warehouse Co., Providence, R. I.; Sunset Terminal Warehouse Co., Los Angeles, Cal.

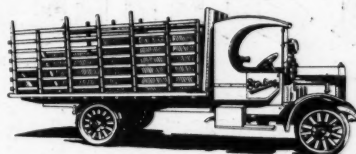
1. Lifts higher ($2\frac{1}{2}$ to 6 inches).
2. Lifts easier (never takes 2 men).
3. Lifts with handle in ANY position.
4. Lifts and lowers VERTICALLY.
5. Stands the gaff.



Let's see what they might mean to you. Write for our catalog. Better do it right now. There's nothing to be gained by delay—and much perhaps to be lost. Write

Lewis Shepard Co.
568 First St. Boston, Mass.

Agents in the principal cities



Economy

is the big thing that will appeal to you when you make an intelligent comparison of motor-propelled and horse-drawn hauling outputs. Most men who have come to a point where haulage requirements demand motor trucks, satisfy themselves on many points before they make a decision as to the kind of truck. To some, simplicity of construction is the big feature; to others, economy of fuel and tires is the most important;—motor size and type, service and the possibility of getting parts and other items. But after all, the most economical truck is the one that stays on the job and delivers the goods at an operating cost that yields a good profit on the investment.

If that is what you are looking for, look at the "Sterling."

Salesrooms and Service Stations in all Large Cities

Sterling Motor Truck Company

Builders of Motor Trucks for Twelve Years
Milwaukee, Wis.

The Sterling logo, featuring the word "Sterling" in a stylized, cursive script font. The letters are bold and interconnected, with a slight shadow or outline effect.

Motor Trucks are built in the following sizes: 1½, 2, 2½, 3½ and 5-Ton, Worm Driven, and 5 and 7½-ton, Chain Driven. Bodies for all kinds of hauling.

Trailmobile

Trade-Mark Reg. U. S. Patent Office

Trail the Freight Over the Roads

The Motorless
Motor Truck

Thousands
in Use

DIVISION 1

Light, one-way
four-wheeled Trail-
mobiles for use with
passenger cars or
light trucks; 1,250
lbs.; $\frac{3}{4}$ -ton, and 1
ton.

DIVISION 2

Heavy-duty four-
wheeled Trailmo-
biles for use with
trucks; $1\frac{1}{2}$ -tons,
one-way; 2 tons;
 $3\frac{1}{2}$ -tons, and 5
tons reversible and
one-way.

DIVISION 3

Semi-Trailmobiles:
 $2\frac{1}{2}$ tons; 4 tons; 6
tons, and 10 tons.

THIS Trailmobile is used by Henry Anner of Georgiana, Fla., to haul freight between Cocoa and Georgiana, 6.2 miles.

It carries over a ton and a half at a trip, while the maximum capacity of the truck is 1,600 pounds. So it triples the truck's capacity.

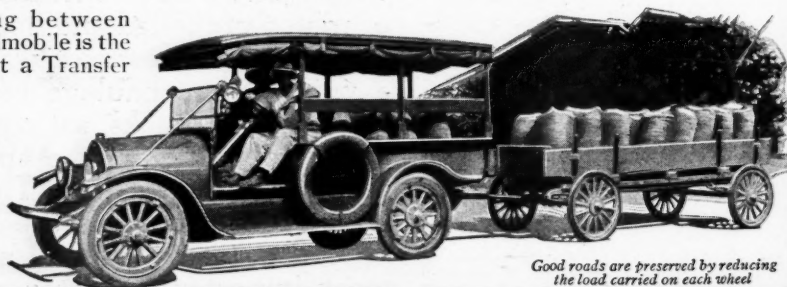
Frequently the Trailmobile is left for loading or unloading while the truck goes about other business and much time is saved in that way.

In six months not a cent was spent on the Trailmobile for maintenance. The owners are greatly pleased.

For hauling between towns the Trailmobile is the best investment a Transfer man can make.

"Economy in Haul-
ing", a booklet,
tells why.

The Trailmobile
Company
515-535 E. Fifth St.
Cincinnati, Ohio



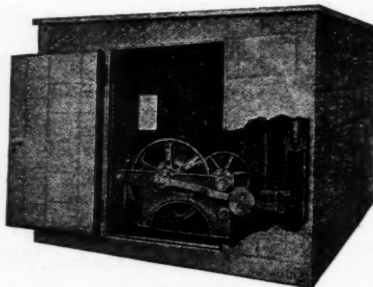
Good roads are preserved by reducing
the load carried on each wheel

MANY OF THE LARGEST TERMINALS AND STORAGE WAREHOUSES, DOCKS AND MILLS
IN THE UNITED STATES HAVE FROM ONE TO FIFTY OR MORE
OF OUR WHIPS.

ONE OPERATING ROPE CONTROLS—HOISTS, LOWERS AND HOLDS THE LOAD FOR OUTRIGGER
AND HATCHWAY SERVICE

In Use at—

Terminal Warehouse Co., Prov., R. I.
National Dock & Storage Co., East Bos-
ton, Mass.
New York Dock Co., Brooklyn, N. Y.
Brown & Adams, Boston, Mass.
Union Wool Co., Boston, Mass. Having 14
in use.
New Bedford Storage Warehouse Co., New
Bedford, Mass.
Borden Condensed Milk Co., New York City.
Eddystone Mfg. Co., Philadelphia, Pa.
Jamestown Worsted Mills, Jamestown, N. Y.
Wuskanut Mills, Farnumville, Mass.
New York Central R. R. Hay Depots, 33rd
St. and 11th Ave., New York City.
Palmer Docks, Brooklyn, N. Y.
Railway Supply & Manufacturing Co., Cin-
cinnati, Ohio.
S. Silberman & Sons, Chicago, Ill.
Utica Steam and Mohawk Valley Cotton
Mills Co., Utica, N. Y.
Canada, Atlantic & Plant Steamship Co.,
Boston, Mass.



Size No. 15
1500 lb. Whip in Pent House of
The Charles River Stores
Beverly Street, Boston, Mass.

VOLNEY W. MASON & CO.

INC.

Established 1860
Incorporated 1902
Telephone Gaspee 1211

PROVIDENCE, R. I., U. S. A.

PATENT WHIP HOISTS

For Mills, Docks, Cotton and Woolen
Warehouses, Etc.

EXPRESS SERVICE
200-400 feet per minute

SEVERAL THOUSAND IN USE

FRICTION PULLEYS
AND CLUTCHES

Their Special Value is in Handling Baled Wool, Cotton, Hay, Barrels, Boxed and Cased
Merchandise of All Descriptions

They Are Often Installed as Auxiliaries to Elevators

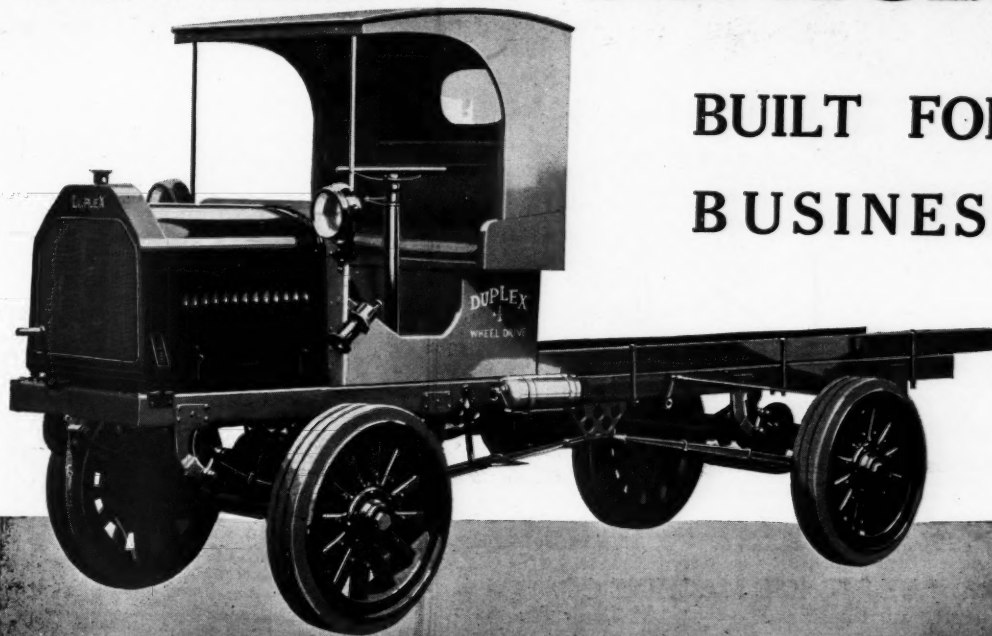
VOLNEY W. MASON & CO., Inc.

PROVIDENCE, R. I.

D. P. KAERCHER ELECTRICIAN and ENGINEER
76 Summer Street, Boston, Mass.
Representative for Boston and Vicinity

Many concerns lose a large percentage of their profit by not being familiar
with existing facilities for handling commodities in and out of the warehouse.

DUPLEX TRUCKS



BUILT FOR
BUSINESS

The Duplex Limited

HERE is a general purpose truck of medium capacity, pneumatic tired, which develops a road speed of 25 miles per hour loaded, with the motor running only 1300 R. P. M.

This means that the power is in the motor itself—and that the Duplex Limited does not depend for its power on low gear ratio.

The Duplex Limited is a Duplex through and through—fully as fit for its class of work as the famous Duplex 4-Wheel Drive—which has such a wonderful prestige in the heavy duty field.

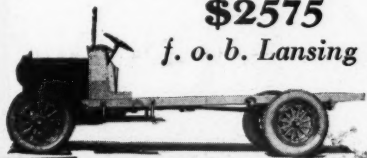
4 Cylinder, enclosed type motor—water cooled—cast en bloc. Bore 4", Stroke 5 1/4". 3 Point Suspension. Pneumatic Cord tires. 145" wheel base. Equipped with Windshield, Electric lighting and starting; Ammeter; Boyce Motometer; Speedometer; Electric Horn; Tools; Jack; Rim Wrench; Front fenders; Grease gun. Drivers' seat without extra charge. (Power Tire pump at extra charge.)

Write for Booklets Describing the Duplex Limited

Duplex Limited

\$2575

f. o. b. Lansing



DUPLEX
BUILT
FOR BUSINESS

IT is a fact that greater numbers of trucks are today being bought on their known performance value—not what you think they can do but what they actually do accomplish.

The famous Duplex 4-Wheel Drive Heavy Duty Truck has back of it years of remarkable achievement—and a standing so high that it is generally accepted as the leading truck of its kind.

In the Lumber and Logging Industry; in the Oil Fields; in Road Construction work; for hauling Sand, Gravel and Concrete—in fact wherever heavy hauling is done there you will find Duplex 4-Wheel Drive Trucks—and you will find them making good.

The Duplex Truck Company is one of the oldest and most successful truck companies in America—made so by the owner service of the Duplex Truck itself.

Today Duplex 4-Wheel Drive Trucks are finding increasing favor in all lines of business because everywhere business men want to get away from experimenting with trucks.

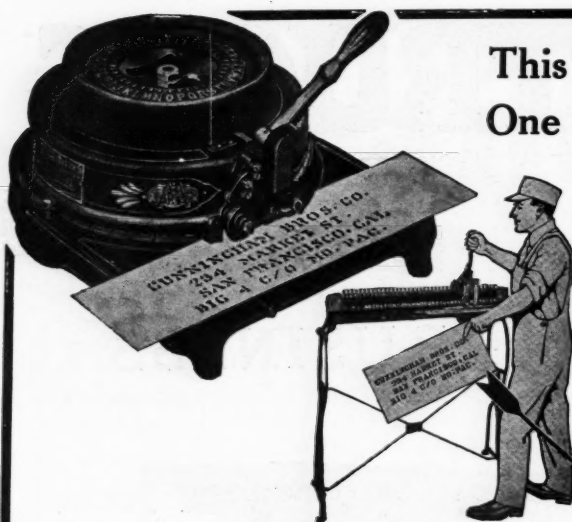
The facts about the Duplex 4-Wheel Drive are becoming more and more known.

Duplex 4-Wheel Drive—3 1/2 Ton Capacity. Price \$4000, f. o. b. Lansing

The more critical you are as a buyer the more essential it is that you investigate the Duplex. Write for folders which give the facts about the Duplex in owners' hands.

Duplex Truck Company
Lansing • Michigan

One of the Oldest and Most Successful Truck Companies in America



This Bradley Stencil Machine and One Boy Will Do the Work of Three Markers

And do it with black, clean cut accuracy that is straight insurance that your shipments *will go through*. No sidetracking or delay due to careless illegible marking. Follow the arrow and you will see the actual work—just as you can have it done in your place.

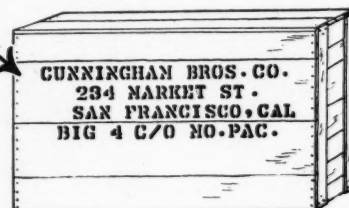
This is a startling economizer of Time, Money and Labor. You prove it on the following proposition:

Write us today and we will send you a "Bradley" ready for use—300 stencil cards, Patent Ball Marking Brush, etc. **PREPAID. USE IT FOR A MONTH AT OUR EXPENSE.** Then, if it doesn't cut cardboard stencils **faster** than any other machine or any expert can do them—**SEND IT BACK.** (No quibbling or correspondence on our part)—and we will pay **Return Freight.**

This is the biggest promise and the fairest proposition you have ever had. **Order The Bradley Stencil Machine—NOW.** You are losing **Big money** every day you wait.

BRADLEY STENCIL MACHINE CO.
3744 Forest Park Boulevard St. Louis, Mo.

Note the Clarity of Bradley Stencils



HOW ARE YOU BEATING COMPETITION ON SPECIAL HEAVY JOBS?

Equipping your heavy duty trucks with Mead-Morrison Truck Winches (either Horizontal, Drum, or Vertical Capstan type) will enable you to send out two men on a job that now takes double that number or more.

Think of the jobs you might get if you could figure on this basis regularly.

Mead-Morrison Truck Winches are making money for many truckmen by increasing their profit-producing business.

Many truckmen have told us of the particular advantages of Mead-Morrison Truck Winches for handling unusual jobs—how they made money under difficult conditions because their trucks were Mead-Morrison equipped.

Write in for their story and for the name of our nearest Distributor.

See Mead-Morrison Truck Winches at the New York and Chicago Motor Truck Shows.

MEAD-MORRISON MFG. CO.

East Boston, Mass.





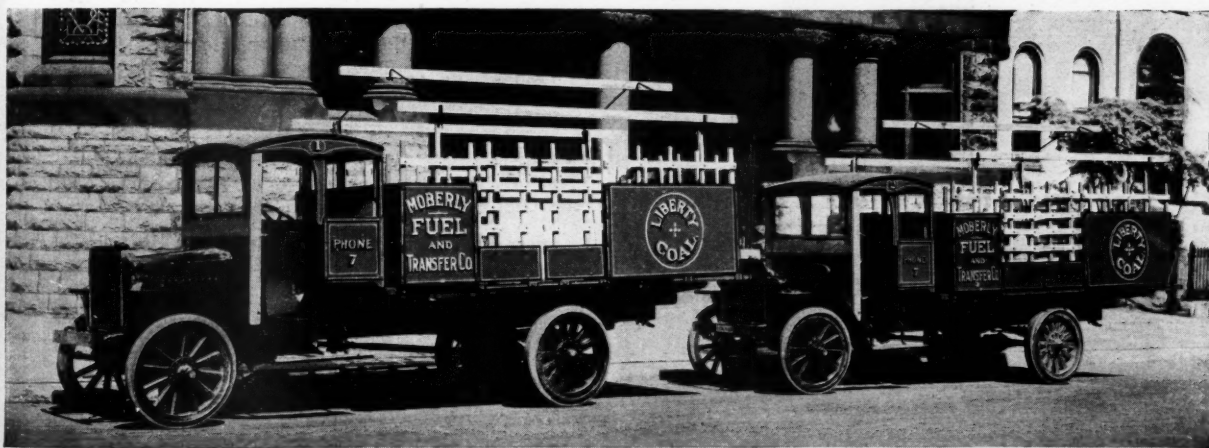
DENBY MOTOR TRUCKS

In big city and small—for use on city streets or in interurban hauling—storage and moving companies prefer the Denby.

With bulky, top-heavy loads and big van bodies, whatever the road or grade, they go unfalteringly about their business, steadily earning dividends for their owners.

Backing this dependability is an economy of fuel and tires, and a low upkeep expense, that makes the total cost of transportation very low.

Denby Motor Truck Company—Detroit



Here is Efficiency

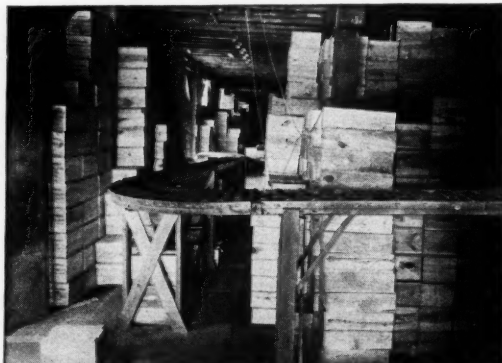
THE constant wear and tear on floors can be saved. The Mathews Gravity Conveyor will do it.

Miles of steps can be saved. Expensive truck and elevator equipment can be eliminated. The time of your employees can be conserved; they will be able to turn out more work. The Mathews is doing all these things for many storage houses throughout the country. And it saves valuable floor space.

The Mathews Gravity Conveyor carries merchandise of all kinds quickly and safely with no expense for power. We have some interesting information for your consideration.

Write now.

MATHEWS GRAVITY CARRIER COMPANY 134 Tenth St., ELLWOOD CITY, PA.
Branch Factories: Port Hope, Ontario London, England



MATHEWS
SPEED ECONOMY
GRAVITY ROLLER CONVEYER

MAGIC SCRATCH REMOVER



If each of your packers and van men has a Magic Scratch Remover in his pocket, it will save you hundreds of complaints and tons of grief.

It is simple to use and requires no work at all. Just rub over the scratch and it's gone forever.

FREE TRIAL OFFER

Mail this ad with your letter head and we will send you a half dozen postpaid, strictly on approval. See for yourself how quickly they hide scratches, bumps, bruises and mars on any kind of finish.

If the Magic Scratch Removers **make good** send us \$2.60 and they are yours.

On the other hand if you are displeased for any reason whatsoever, return the shipment at our expense and the trial costs you nothing.

You can't lose on this proposition. Take advantage of it **TODAY**.

The M. L. Campbell Co.

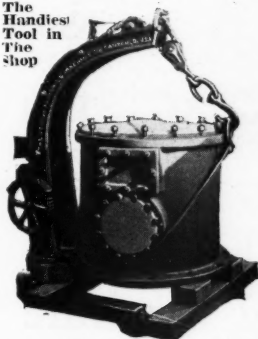
708 East 19th St.,

Kansas City, Mo.

This CANTON PORTABLE CRANE

Has the Fairbanks O. K.

The
Handiest
Tool in
The
shop



Because it is built to a quality standard—not to a price. It has the O. K. of every user, not only because of its strong construction, but because *one* crane lifts and moves the heavy, awkward pieces that formerly wore out six men in handling—and does it in less time.

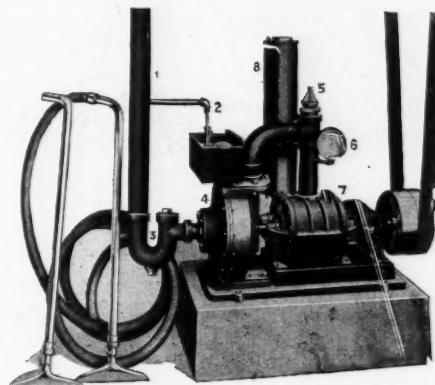
Its extra strong base casting, projecting arms and gears are made from a mixture of cast iron and steel

—carefully finished and well fitted by expert mechanics. It is tested and guaranteed to *safely* lift its rated load. And they are made in sizes that fit the needs of any warehouse.

Let a Canton Crane take the load off the men and make *one* man's time worth *six*. Get our free booklet containing money saving ideas for warehouse owners—get the particulars—write for them now.

The Canton Foundry & Machine Co.
CANTON OHIO

Permanent Exhibit Salesroom,
Grand Central Palace, New York



Do You Clean Carpets?

You may have the finest warehouse and equipment in the country but if you do not have a modern carpet cleaning department your building and your service to your customers are not complete.

Not only is your service incomplete but you are losing a valuable opportunity to increase your profits. You store your customers' rugs and have to return them. Why not return them clean? The vacuum shampoo process thoroughly renovates a rug from warp to nap. It removes all fine dust and caked dirt, restoring the original colors.

Connersville Centrifugal Separating Vacuum Cleaners

were designed especially for commercial carpet cleaning. By means of the patented centrifugal separator, dirt and water are separated from the air and discharged directly into the sewer. They handle dry dust and suds without change of tools. They are easy to install and economical to operate. The investment is small and returns are large.

Write Department I for full information regarding methods and equipment.

SOLD BY

Electrical & Specialty Supply Co.
9 South Clinton St. CHICAGO, ILL.

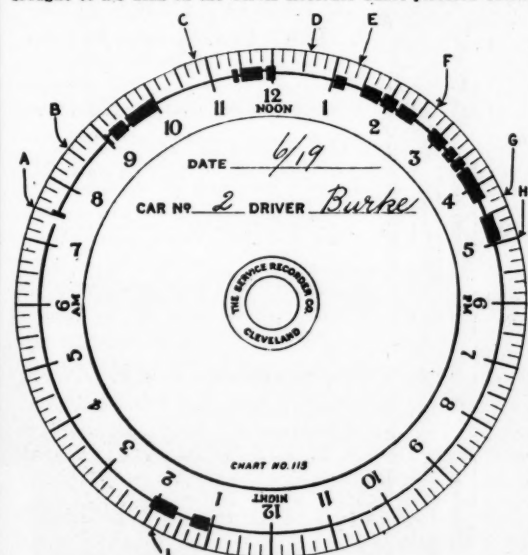
MANUFACTURED BY

United Vacuum Appliance Division
of LANDERS, FRARY & CLARK

CONNERSVILLE, INDIANA

What's Your Truck Doing All Day?

Here are the facts of one day's operation—facts that the truck owner didn't have to "go out after," but facts which were brought to his desk on the Servis Recorder Chart pictured below.



Daily Servis Recorder Chart (much reduced). Heavy mark shows when truck is in motion; narrow line shows truck standing still.

A—truck started at 7:30. F—held up 20 minutes (drawbridge).
B—hour and 25 minutes to load. G—stopped 15 minutes (somewhere on return trip. Ask about).
C—hour and 20 minutes (at freight depot). H—put up at garage at 5:00.
D—a lunch hour. I—taken out during night.
E—fifteen minutes (loading).

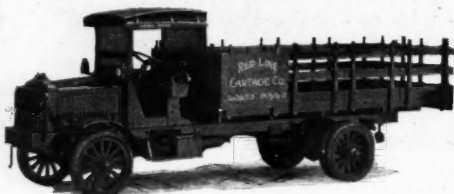
Write for Booklet

THE SERVICE RECORDER COMPANY, CLEVELAND

Standard

 DETROIT
USA

Ship by Truck and Vote for Good Roads



A 3 1/2 Ton Standard

AFTER ALL—the Real Test of a Motor Truck is in how Long it Lasts. Time and Use alone can bring out this Argument of Arguments in a Motor Truck—either to establish For—or rule Against.

STANDARD Motor Trucks have remarkably Long Lives. The first STANDARD Built has been in operation for nearly Ten Years. Day after Day and Week after Week and Month after Month, in the Trackless Spruce Forests of the Northwest—a Stock Fleet of 125 STANDARDS met the unreasoning requirements of War Work and STAYED STANDARD.

Your STANDARD Motor Truck will Wear just as Well. All STANDARD Motor Trucks are Built of the Same Stern Stuff which makes them the "Survival of the Fittest."

INCORPORATING STANDARD UNITS
such as:

TIMKEN-DETROIT Axles and Bearings
CONTINENTAL Motor EISEMANN Magneto
SPICER Universal Joints LONG Radiator
GEMMER Steering Gear PERFECTION Springs
BROWN-LIPE Clutch and Transmission

Will be Exhibited at National Automobile Shows—

New York, January 3 to 10
Chicago, January 24 to 31

STANDARD MOTOR TRUCK CO.
Detroit, Mich.

Standard

Registered

MOTOR TRUCKS

1, 2, 3 1/2 and 5-Ton Capacities with
body style for every business

"All the name implies"

"KELLEY"

Don't Forget the Name

You
Should
Know
That



The Progressive Warehouseman Operates a Carpet Cleaning Department, and he uses

The Kelley Scrubbing Machine

"A Practical Device"

Write for complete information
on the machine or the work

SOLD BY

Electrical & Specialty Supply Company
9 S. Clinton Street Chicago

Manufactured by

KELLEY ELECTRIC MACHINE CO.

Buffalo

New York

BREEN'S PIANO DERRICK

What Everybody Needs

PIANO MOVERS find that the hoisting and lowering of pianos is made easy, safe and economical by the use of this practical, adjustable Window Derrick. Handy to carry, easily put in place by one man, always ready and quickly utilized.

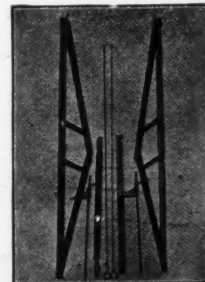
It is a practical patented invention, which has been in use for twelve years and has demonstrated its value beyond question. It clamps to window. There is also a swing under bar which is placed under outer end of piano and carries it in or out.

Every mover of safes, pianos or heavy merchandise needs Breen's Piano Derrick because it saves the strength of the men, means a tremendous saving of time, and obviates jams and scratches. Several firms have taken out third story window, set the derrick in place, hoisted piano, and replaced window in 25 minutes. Also manufacturers of Belts and Bars to hoist Pianos and Ropes, Blocks and Piano Covers.

Write to-day. Catalogue for the asking.

WM. H. BREEN

219-231 Rutherford Ave., Charlestown, Mass.



EXCELSIOR PACKING PADS ARE LIKE INSURANCE

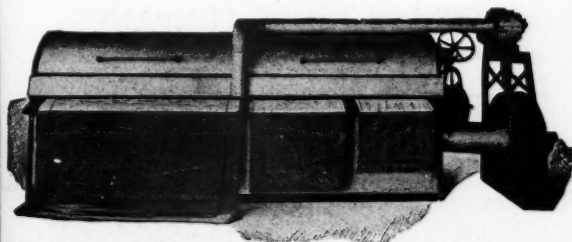
YOU pay only a small premium charge for the best protection obtainable. Don't think of them as an expense, consider the loss and inconvenience of claims for damage and the satisfaction of knowing that anything you ship will reach its destination exactly as it left your hands. You will incur no obligation by getting our samples and prices.

H. W. SELLE & CO.

Manufacturers

1000-1016 N. Halsted St., CHICAGO, ILL.

**Because there is
Big Money in It
storage and warehouse
companies are installing
this big rug cleaning
machine**



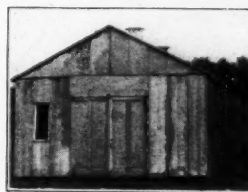
The most perfect Rug Cleaner made

The Cleveland Laundry Machinery Mfg. Co.
CLEVELAND, O.



THE NEW STOREROOM, UP IN ONE DAY

The Building That Creates New Warehousing Opportunity



Cards Went Out Yesterday—
Farm Machinery in Today



Canned Goods in Already



Freight Depot on a New
Siding on Short Notice

There's lots of short time "in and out" business for the warehouseman who can handle it. But such temporary service must cost little, if it is to succeed.

To appeal to the man with the "in and out" proposition, with cotton, or heavy machinery, or sacked potatoes, you have only to offer a weatherproof skid. It is the simplest form of warehousing and cheapness is fundamental.

Prudential Steel Buildings can be erected on short notice, in units, offering any capacity desired. They can be taken down and moved on short notice. They are fireproof. They are inexpensive. They meet "in and out" warehousing needs where the costly concrete structure for more permanent and more elaborate service demands a prohibitive tariff.

Let us open the new warehousing field to you.
Write us about Prudential Steel Buildings.

Ask for Catalog Section No. 49

The C. D. Pruden Co.

Station C
Baltimore, Md.



56 Pine Street
New York City

•Peelle•Products•Protect•

These Buildings Are Equipped With
PEELLE Doors! Is Your's?



Ninth Street
Terminal,
Cleveland, O.

PEELLE TRUCKABLE FREIGHT ELEVATOR DOORS

The Most Efficient Elevator Doors

IN the Ninth Street Terminal, as in thousands of other prominent buildings throughout the country, PEELLE Truckable Freight Elevator Doors are proving their exceptional value.

Scientifically constructed, absolutely fire-proof, PEELLE Doors are a complete triumph in elevator door efficiency. They operate vertically in the elevator shaft by electricity, manually or semi-automatically. There are no projections to catch or tear.

Without obligation, ask for the advice of our engineering staff or send for a copy of our latest catalogue.

Other Peelle-Equipped Warehouses:

Tidewater Warehouse	Fox Warehouse	Neal Fireproof Storage
Roulston Warehouse	Army Warehouses	Bingham Warehouse
Medical Supply Store-house	Public Cotton Warehouse	J. W. Packard Warehouse



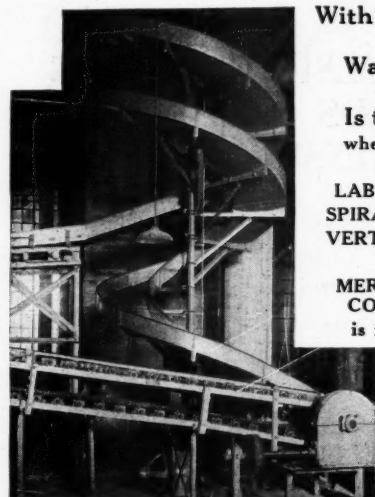
Beware of Imitators who term their doors
"PEELLE TYPE," "PEELLE STYLES," etc.

THE PEELLE COMPANY

Stewart Avenue & Harrison Place
BROOKLYN - NEW YORK

Chicago	Cleveland	Boston	Philadelphia
Canada	Montreal	Toronto	Winnipeg

•Put your Elevator Door Problems up to PEELLE•



With Help Scarce
AND
Wages High
NOW
Is the Time
when the need
for our
LABOR-
SAVING
SPIRAL CHUTES
VERTICAL LIFTS
AND
MERCHANDISE
CONVEYORS
is imperative

Owned by
The Haslett
Warehouse
Co., of San
Francisco,
the develop-
ment of
handling

problems in our own fourteen general merchandise store-houses has enabled us to give practical advice to warehouse and terminal concerns. We are at your service.

Through long experience we have learned how to combine every form of merchandise conveyor so as to obtain the most practical results.

When no standard form of conveyor is adequate, we design special machines.

When you want information on conveyors, write us. We can help you.

The Haslett Spiral Chute Co.

Factory: Madison and 20th Sts., Philadelphia, Pa.
Southern Office: 523 Calvert Bldg., Baltimore, Md.
Pacific Coast: 228 Pine St., San Francisco, Cal.

TRANSVEYORS

Moved on wooden platforms by elevating the Transveyor under the loaded skid; left in the warehouse on Transveyor platforms, compactly stored by pressing the Transveyor foot pedal—is Transveyor Transfer and Storage.

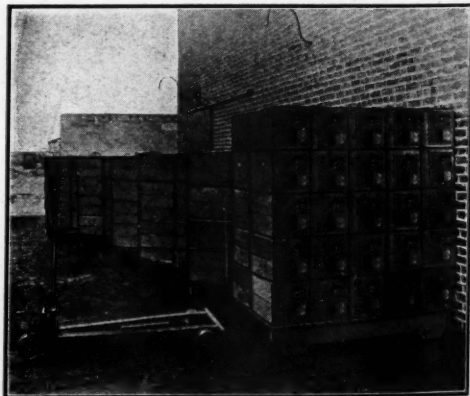
No handling—no congestion—extraordinarily large loads easily handled by one man.

Views of warehouse applications are yours for the asking.

COWAN TRUCK COMPANY

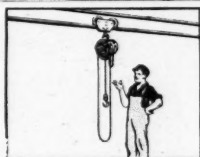
12 Water Street,

HOLYOKE, MASS.





Five Men and a Hand Truck



One Man and a Yale Spur-Gear Chain Block on an I-beam trolley.

Equal

AND the one man with the Yale equipment will perform the same work in the safest way, take up less working space, and do it quicker.

For handling the product, crude or finished, for serving machines, loading and unloading trucks and cars, for handling forgings, castings, anything that has to be lifted and moved, Yale Spur-Gear Blocks on I-beam trolleys multiply men and machine power.

"From-Hook-to-Hook-a-Line-of-Steel"

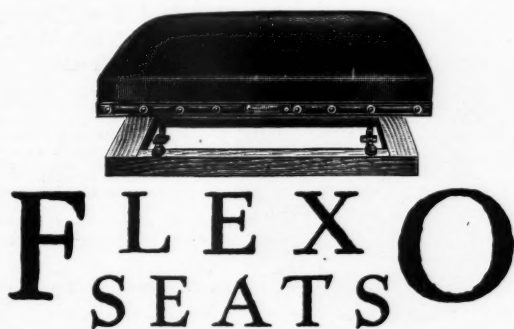
The new 1920 catalog shows you many ways to save money and increase production in your plant by using Yale Chain Blocks and Electric Hoists.

Let us send you your copy

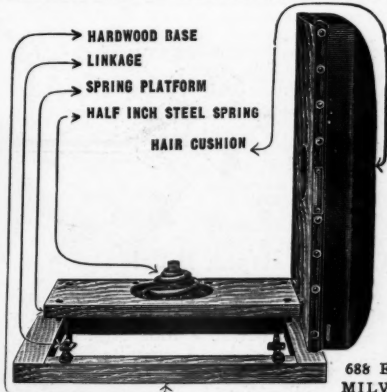
THE YALE & TOWNE MFG. CO.

Makers of the Yale Locks

9 East 40th Street New York City



The unusual durability and comfort of Flexo Seats are due to exclusive features that make them the most economical.



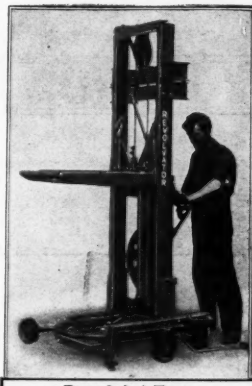
We guarantee them, for five years.

When you buy a truck, specify the seat that wears longest and eliminates backache and kidney affection — Flexo Seats. If you operate trucks have Flexo Seats installed today.

THE FLEXO SEAT CO.

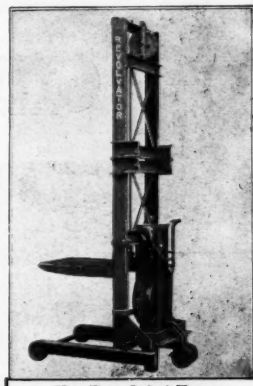
688 E. Water St.,
MILWAUKEE, WIS.

A Machine to Suit Your Piling Not Piling to Suit a Machine



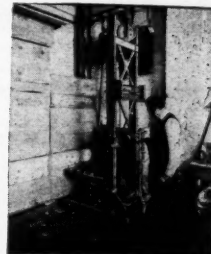
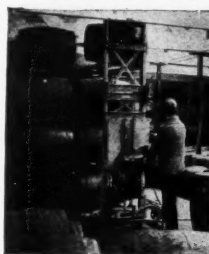
Revolving Type

The exclusive feature of this machine is the Revolving Base. The loading platform may be swung in any direction without changing the position of the machine.



Non-Revolving Type

Some piling requires a machine of this type which is similar in construction to the Revolving type but without the revolving base feature.



The Revolvator is made in six models; hand, motor and combination hand and motor operated all in both Revolving and Non-Revolving types. You are not limited in the selection of a machine for your business. There is a REVOLVATOR to suit the peculiarities of any kind of piling.

One man can take a REVOLVATOR to any place. It is the "Steel Giant" that does the work of a "gang." A Revolvator reaches and uses every available foot of storage space from floor to ceiling. Our Bulletins tell more. Send for them.

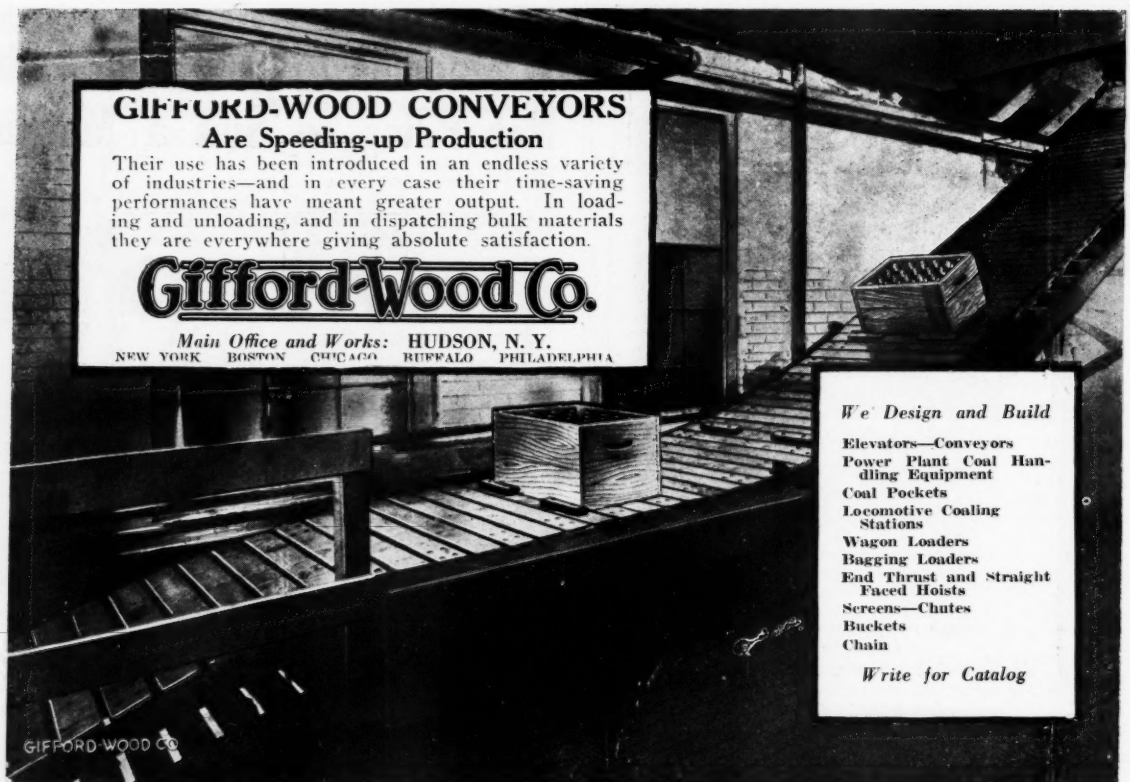
REVOLVATOR CO.

Sales Agents for N. Y. Revolving Portable Elev. Co.

389 Garfield Ave.,

Jersey City, N. J.

REVOLVATOR



GIFFORD-WOOD CONVEYORS
Are Speeding-up Production
 Their use has been introduced in an endless variety of industries—and in every case their time-saving performances have meant greater output. In loading and unloading, and in dispatching bulk materials they are everywhere giving absolute satisfaction.

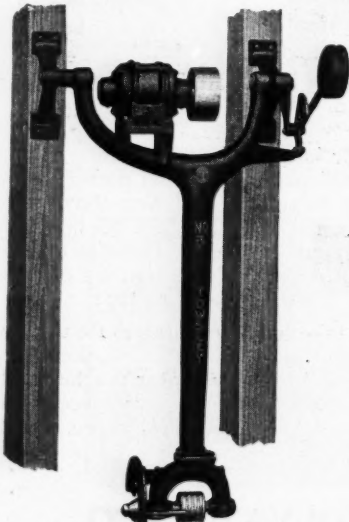
Gifford-Wood Co.
 Main Office and Works: HUDSON, N. Y.
 NEW YORK BOSTON CHICAGO BUFFALO PHILADELPHIA

We Design and Build
 Elevators—Conveyors
 Power Plant Coal Handling Equipment
 Coal Pockets
 Locomotive Coaling Stations
 Wagon Loaders
 Bagging Loaders
 End Thrust and Straight Faced Hoists
 Screens—Chutes
 Buckets
 Chain

Write for Catalog

GIFFORD-WOOD CO.

Quality First—Service Always



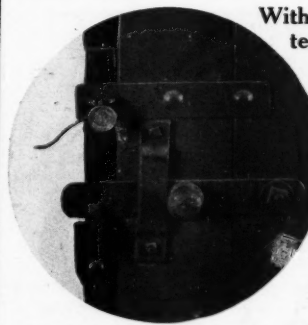
PROMPT
SHIPMENT

No. 6 Motor Driven Swing Cut-off Saw

A rapid and accurate cutter. Counter-weight gives quick return to saw, self-centering device for saw, self-oiling boxes. Machine carries blades up to 20-in. without vibration. Write today for Bulletin of motor-driven and belted Swing Saws.

JOHN T. TOWSLEY MFG. CO.
 1010 Evans St., Cincinnati, Ohio

With This Seal You Get Better Protection Than With a Dozen Locks



The Brooks Patented Tin-Bottom Seal defies all efforts at tampering. Unlike the finest lock, it cannot be "picked." Patrons are guaranteed protection to their goods stored in warehouses using Brooks seals. Warehouses using Brooks Seals are free from complaints. The unbroken seal, its number being verified, leaves no doubt that any package, trunk, or container is as originally sealed.

We produce metal strip seals for use in the same or variety of other uses. Let us know your needs. Write us for quotations.

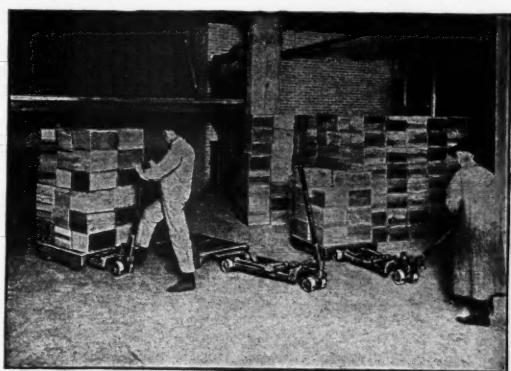
Baystate Storage Warehouse Co. of Springfield, Mass., is one of our users.
E. J. BROOKS AND COMPANY,
 227-229 Fulton St., New York City

STORAGE SEALS



Cut Out Repair Bills!

Protect the furniture you move with Loupilco Furniture Pads—soft, resilient, durable. They save money and customers—sure as you're a foot high. Write for prices and descriptions. Louisville Bedding Company, Incorporated. Owners of Louisville Pillow Company, Louisville, Ky.



Save Money. Time and Labor by Using

"THE HOLYOKE" Transfer Truck

One Man and this truck performs the work of Four Men.

Various models to suit every variety of work.

All strongly built and sold under a liberal guarantee

Write for Circular B-1

Holyoke Truck Company

Main Office and Factory

105 Race Street, HOLYOKE, MASS.

Export Department:

77 Broad Street, New York City



CRANE PULLER FOR HEAVY TRUCK WHEELS

A
REAL
TIME
SAVER
WHERE
TIME
IS
MONEY



GUARAN-
TEED
TO LAST
A
LIFE-
TIME

ONE Man can remove the heaviest Gas or Electric Truck Wheel in 15 Minutes with this PULLER.

Write for Catalog Z

ORDER FROM YOUR JOBBER

CRANE PULLER COMPANY

54 Lake St.

Arlington, Mass.



Better Protection of goods in shipment and storage

The problem of protecting rugs, carpets, draperies, etc., against moths, mice, germs, while in storage or in transit, is solved by the use of

WHITE TAR PAPER

Made in two grades—Pine Tar and Cedar. Pine Tar for ordinary materials; Cedar for the finest fabrics. Put up in rolls of 12 sheets, each sheet 40 x 48, in full size and in continuous rolls 50 yds. to 1,000 yds. Also heavy tar bag paper cut 5 x 7 and packed 100 sheets to the carton.

We sell Naphthalene Moth Balls, Flakes Crystals, Powder and Blocks; Lavender Compound and Cedar Compound in one-pound and two-pound packages, 100-pound boxes and barrels.

Write today for price list and full information.

The WHITE TAR COMPANY
CLIFF & JOHN STREETS, NEW YORK, N. Y.



Save
Time
and
Labor
Sawing
Boxing
and
Crating
Lumber

This neat, compact saw can be hung up against any convenient wall or column, thus taking up no valuable floor space.

The Reliance MOTOR DRIVEN Swing Saw

will save the time and energy of hand cutting—do the work much better and faster—and, being self contained, can be placed anywhere, regardless of power supply.

Easily installed by anybody. Direct or alternating motor. Built in three sizes, to accommodate any class of work.

Tell us your requirements and we will submit proposals.

Reno-Kaetker Electric Co.
4600 SPRING GROVE AVE.
CINCINNATI, OHIO

G. W. Jones Lumber Co.

807 Lumber Exchange Building
CHICAGO

Manufacturers of
CRATING AND BOXING LUMBER OF ALL KINDS

We refer you to the leading warehouses in Chicago as to the quality of stock we ship.

Wholesale Prices

Stock Guaranteed

Established 1875

Canvas Covers

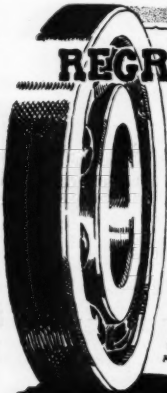
For Wagons and Trucks

COVERS and TARPAULINS for All Purposes

Awnings, Tents, Flags, Spray Hoods, Yacht Sails, Boat Covers, Mill Aprons, Canvas Bags

L. NICKERSON

173 STATE ST., CORNER COMMERCIAL
BOSTON, MASS.



REGROUND BEARINGS

OUR REGRINDING PROPOSITION
WILL CUT DOWN YOUR BALL
BEARING BILLS. TRY US AND
BE CONVINCED. SATISFACTION
GUARANTEED

AHLBERG BEARING COMPANY
317-327 EAST 26TH ST. CHICAGO, ILLINOIS.

ATLANTA	NEW YORK
BOSTON	PHILADELPHIA
CLEVELAND	PITTSBURGH
DETROIT	PORTLAND, ORE
INDIANAPOLIS	PROVIDENCE
LOS ANGELES	SAN FRANCISCO
MINNEAPOLIS	ST. LOUIS - OMAHA

20% Feed Bill Saver

This means if at present you are feeding 4 qts. to each horse per meal, by feeding crushed oats you save 2.4 qts. The yearly saving is 27 bushels, and figuring oats at 55 cents per bushel means \$15.00 saved on each horse. Just multiply this on each horse you have.

Crushed oats produce bone and muscle and keep horses in better working trim with more staying power, because Crushed Oats gain over whole oats from 15 to 25 per cent in nutriment.

The National is the most economical crusher to do this work—the power consumed costing about 10 cents per horse per month. It frees the food from foreign particles. This crusher will crack corn at the time it's crushing oats. Write for our money-saving booklet on crushed oats feeding—it's free. Write now.

National Oat and Corn Crusher

made by Excel Mfg. Co., Pottersville, N. J.

Renew the Power and Life of
Your Engine

by having the

Cylinders Reground

and equipped with new

Pistons—Piston Pins—Piston Rings

by the

Butler Manufacturing Co.

1124 E. Georgia St., Indianapolis, Ind.

We specialize in

Furniture Pads and Covers

Write us today for prices
and we will submit samples.

Prompt shipments and perfect satisfaction guaranteed.

TOLEDO CANVAS PAD COMPANY

2014 Adams Street

TOLEDO, OHIO

A TRIUMPH is your
BUCKEYE SILL PIANO TRUCK

says an owner of four of them

SELF-LIFTING PIANO TRUCK CO., Findlay, O.



End
Truck
Covers

Straps

Giant Grip Traction Equipment for Motor Trucks



MAKES transfer and express trucks 100% efficient. Insures against time lost through tie-ups due to mud, sand, snow or other bad going. Carried in tool box. Applied when needed—with bare hands in two minutes. No tools; no jacking. Write today. Please give name and tonnage of trucks. Address

Challoner Company
Established 1883
Dept. TS Oshkosh, Wis.



If you don't find what you want here, your advertisement here will find it for you.

This Exchange section serves a real purpose in the industry by affording a central market place for the disposing of equipment no longer needed, and the securing of special apparatus at bargain prices. If you have any equipment for sale or wish to sell your business, this section is the logical place to advertise. All advertisements in this section will be accepted at a flat rate of three cents per word for each insertion.

WANTED—Position as Assistant Manager or Superintendent with a growing concern by young man with seventeen years' experience in General Merchandise and Household Goods storage. Able to take entire charge of office details. First class reference. Address: P. O. Box 560, Distribution & Warehousing, 239 W. 39th Street, New York, N. Y.

WE WANT TO SPEND \$25,000 CASH for unclaimed merchandise left in storage. We will buy for spot cash. Novelties of all kinds, household specialties, toys, knick-knacks, books, post cards, jewelry, pictures, patented articles, "fool" inventions. Anything of which there is a large quantity. Send sample and say how many you have. Our spot cash offer by return. Address Fantus Brothers, 525 So. Dearborn St., Chicago, Ill.

FOR SALE—Part interest in an old established Storage, Van & Packing business (incorporated) in Philadelphia. Good opportunity for party who will take an active interest in the business. Box 301, Distribution & Warehousing, 239 W. 39th Street, New York, N. Y.

OWNER OF STORAGE WAREHOUSE established eight years with good line of commercial and distributing accounts, desires to enlarge, taking advantage of rapidly growing City. Invites correspondence with view of forming Company. Attractive proposition for man familiar with up-to-date storage methods. Address: El Paso Storage Warehouse, Box 197, El Paso, Texas.

THE SIGNODE WAY RECOOPERING

Hundred Million Boxes, Bales and Bundles have been Strapped, Sealed and Shipped the Signode Way.

Full Information by Return Mail

SIGNODE

SYSTEM INC.

564 W. ADAMS ST., CHICAGO

BOSTON NEW YORK PHILADELPHIA SAN FRANCISCO

FURNITURE PADS

Made of Durable
O. D. Canvas

STOCK SIZES:

36" x 72" 50" x 72" 75" x 72"

Burlap, Waterproof Tarpaulins,
Bags, Etc.

FULTON BAG & COTTON MILLS, Inc.

330 WYTHE AVE., BROOKLYN, N. Y.

Phone: Greenpoint 4200



New fireproof warehouse now under construction at 6331-33 Broadway, Chicago, for Hebard Express & Van Co., Frank H. Hebard, Pres. Geo. S. Kingsley, Architect, Chicago.

ARE YOU GOING TO BUILD A FIRE-PROOF WAREHOUSE?

Let me make the plans for your new fireproof storage warehouse. I have been building fireproof storage warehouses for 20 years and understand all requirements, financial, design, construction, insurance, etc.

GEO. S. KINGSLEY, ARCHITECT

PETERS' Crank Shaft Grinder

Saves Time and Skilled Labor Eliminates Rebabbitting of Bearings

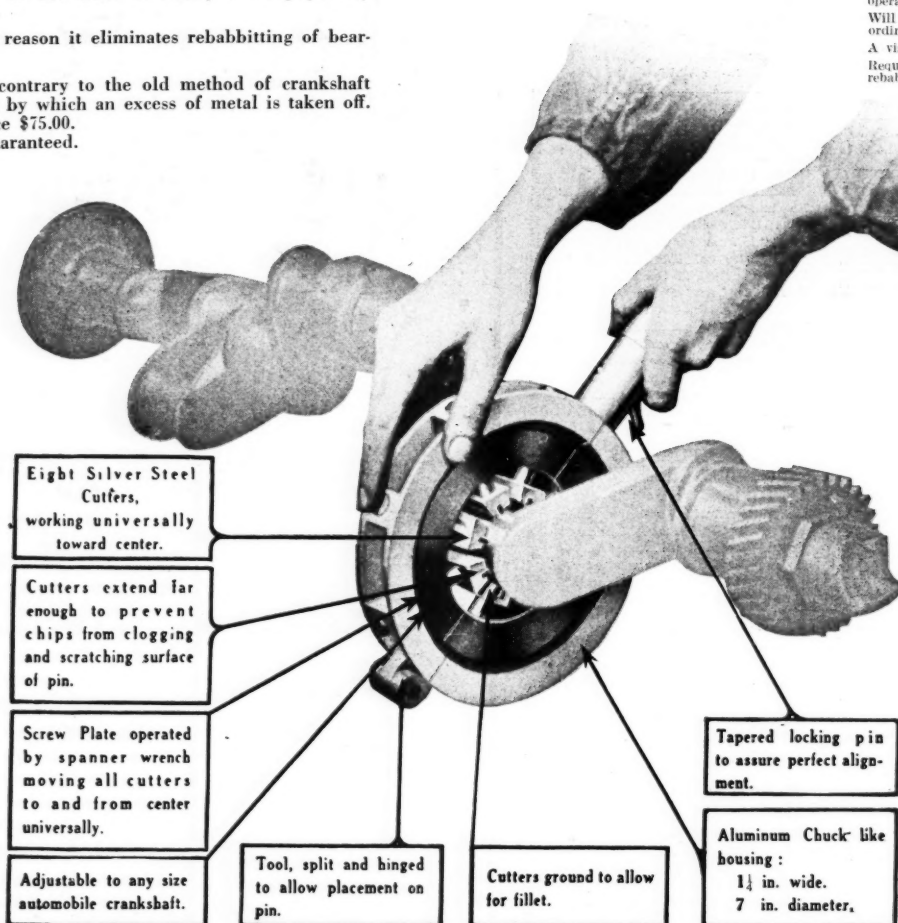
THE sensitive adjustment of this tool makes possible the removal of the "High Spots" only, thereby maintaining the original strength of the shaft as nearly as is physically possible.

For this reason it eliminates rebabbitting of bearings.

This is contrary to the old method of crankshaft grinding by which an excess of metal is taken off. List price \$75.00. Fully guaranteed.

Time and Labor Saving Features

Quick and simple adjustment. Can be operated without dismantling motor. Will true a shaft in one-fifth the time ordinarily required. A vise is all the equipment needed. Requires no skilled labor. Eliminates rebabbitting.



**NEW YORK TRUCK
SHOW**

Jan. 3-10, 1920
8th Coast Art. Armory
194th St. and Jerome Ave.
Space No. 24

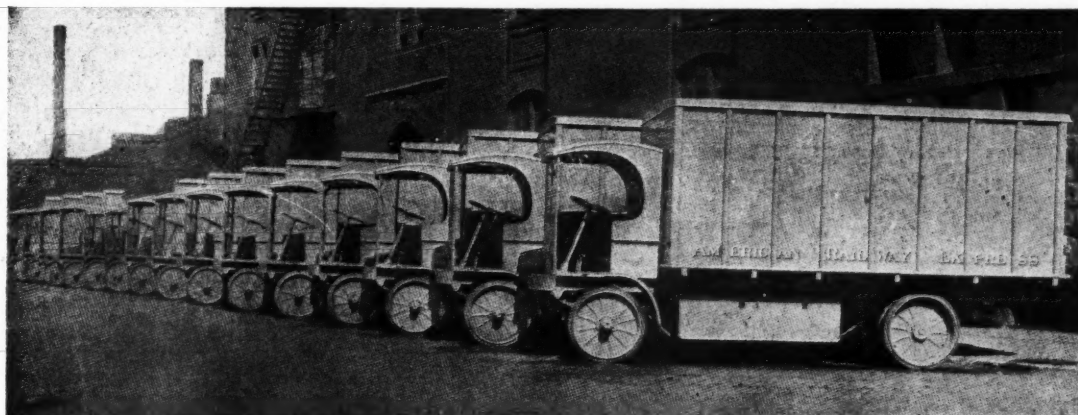
*The only hand tool producing results that surpass
an expensive power driven machine*

ALUMINUM BRAZING SOLDER CO.

Widener Bldg.

Philadelphia, Pa.

WALKER ELECTRIC TRUCKS



The American Railway Express Company operates fleets of Walkers in many cities

The important factors in making an investment for motor trucks are: *Economy, life, design, dependability and satisfaction* coupled with the *reliability and permanency* of its manufacturer.

Walker Electrics fill these requirements and *prove the best investment* because:

ECONOMY—Prominent Users of both Walker Electric and gasoline trucks report their gas trucks cost 50 to 100 per cent more than their Walkers to do the same work.

LIFE—Walker Chassis are of the highest quality throughout and have a *profitable life of 10 to 20 years!*

DESIGN—*The Gasoline truck power plant has a thousand more parts than the Walker!* The Walker Balance Drive delivers at least 95% of the power direct to the tire rims.

DEPENDABILITY—Walkers operate most days per year—in fact need only to be out of service while being repainted.

SATISFACTION—About 80 per cent of Walker orders are “repeat orders” from satisfied users.

RELIABILITY—The Walker Vehicle Company is the largest manufacturer of Electric Road Trucks and Tractors.

PERMANENCY—The Company was established in 1903 and is a pioneer in the motor truck field, and is established on a broad, permanent basis.



Walker Electrics are used *profitably* in most industries.

Ask any Walker User, Dealer or Branch.

WALKER VEHICLE COMPANY

America's Largest Manufacturer of Electric Road Trucks and Tractors

New York

CHICAGO

Boston

LOWEST-TRUCKING-COST

White Trucks



Safeguard Your Winter Hauling

YOU can count on the storm-battling ability of White Trucks. Deep snows may impede but cannot stall them. Their sustained performance is always in evidence when roads are worst and few wheels are turning.

In White 3-3½ and 5-ton trucks with Double Reduction Gear Drive, this ability to conquer severe conditions has been still further developed.

All the driving force of a motor which gets full power from every atom of fuel is applied to the wheels near the rim; *highest leverage is secured*. The gears *roll* in oil, dustproof. There is no sliding contact. The factor of friction is very low.

White Trucks not only do the hardest work. They do it for the least money.



THE WHITE COMPANY
CLEVELAND